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Box PATENT APPLICATION
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Re: New U.S. Patent Application
Title: INTERACTIVE SYSTEM FOR MANAGING
QUESTIONS AND ANSWERS AMONG
USERS AND EXPERTS
Inventors: James D. MARKS, Robert WEAVER & Jeremy SHAO

Sir:

We enclose the following papers for filing in the United States Patent and Trademark Office in connection with the above patent application.

1. Application - 44 pages, including 7 independent claims and 96 claims total.
2. Drawings - 27 sheets of informal drawings (Figures 1-16).
3. Declaration and Power of Attorney.
4. Recordation Form Cover Sheet and Assignment to Body Health Resources Corporation.
5. A check for \$2,480.00 representing a \$760.00 filing fee, \$1680.00 for additional claims, and \$40.00 for recording the Assignment.

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Please accord this application a serial number and filing date and record and return the Assignment to the undersigned.

The Commissioner is hereby authorized to charge any additional filing fees due and any other fees due under 37 C.F.R. § 1.16 or § 1.17 during the pendency of this application to our Deposit Account No. 06-0916.

Respectfully submitted,

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Enclosures

UNITED STATES PATENT
APPLICATION OF

JAMES D. MARKS,

ROBERT WEAVER,

and

JEREMY SHAO

FOR

INTERACTIVE SYSTEM FOR MANAGING
QUESTIONS AND ANSWERS
AMONG USERS AND EXPERTS

Background of the Invention

This invention relates generally to interactive systems. It relates more particularly to interactive systems on the World Wide Web which are designed to be easily modifiable.

5 In an interactive system, a user may engage in a dialog with a system through a series of interactions with the system, and the dialog results in changes to the system's behavior. Many World Wide Web sites are interactive. In contrast to static systems, where users simply read information posted on a site, interactive web sites allow users to alter a site's contents or behavior. Interactive web sites provide a unique opportunity for interaction between users and experts in a certain field. For example, in a question and answer exchange, a user can pose
10 questions and receive answers from an expert, using an interactive web site to facilitate the exchange.

One problem with traditional interactive web sites is the difficulty in modifying them. These systems require system administrators and technical staff to control the interaction between users and administrators. Expensive staff members have to undertake tedious and
15 repetitive tasks, such as archiving older messages and deleting unanswered questions. Systems and methods consistent with the current invention automate these administrative tasks, freeing up staff members to concentrate on aspects of the systems that require judgment and discretion.

A problem with existing interactive systems which use experts is the lack of flexibility available to experts when answering questions. When experts can give only one answer to a
20 question, it is difficult to change an opinion or elaborate on an answer. Systems and methods consistent with the current invention give experts a great deal of flexibility and control. Experts can add references and pictures to their answer. They can refer questions to other experts for

peer review or supplemental or alternative answers. They can post multiple answers to a single question. These capabilities help experts make their responses more accurate and complete.

Summary of the Invention

5 In accordance with the present invention, a method executed by a server provides answers on one or more topics from a set of experts on each topic to questions posed by users in communication with client interfaces, the server being in communication with the client interfaces and the set of experts. In such a method, a question is received at the server from a user via one of the client interfaces and routed to one of the experts selected using information provided with the question. If no information is provided with the question, then the question is
10 posted in a location where it is accessible to the experts and a command is received from the selected expert in response to the question. That command is then executed automatically.

Another method consistent with the present invention is executed by a server and modifies the management of separate fora related to corresponding topics. According to such a method, data is received identifying a user as an authorized administrator. Next, a
15 menu of guides is presented to the identified administrator. The guides consist of a set of choices corresponding to different aspects of a forum. After that, a selection command is received from the administrator to select one of the guides. Then, the selected guide is presented to the administrator. Finally, an action command is received from the administrator indicating actions to be taken with respect to the selected guide, and the action command is executed.

20 An additional method consistent with the present invention is executed by a server and manages the server. The server has a hierarchical configuration composed of different levels arranged in order of increasing generalization, the levels consisting of names with corresponding

values. After receiving a command to retrieve the value corresponding to a given name, the hierarchical structure of the system is searched for the given name. The value found associated with the given name at the least generic level of the system is presented.

Brief Description of the Drawings

5 The accompanying drawings, which are incorporated in and constitute a part of this specification, illustrate an implementation of the invention and, together with the description, explain the advantages and principles of the invention. In the drawings:

FIG. 1 depicts an information-sharing system consistent with the present invention;

10 FIG. 2 is a flow chart of a user interface for a system consistent with the present invention;

FIG. 3 is an example of a home page which offers a user a choice of several fora;

15 FIG. 4 is an example of a forum page for the treatment forum as it appears at a user interface;

FIG. 5 is a flow chart depicting the steps involved with an expert's interaction with the system;

FIGs. 6A-C depict a flow chart showing one implementation of an expert's interaction in detail;

FIG. 7 is an example of how an expert home page appears on an expert interface;

FIG. 8 represents the steps taken by the system to route a question to one of the experts;

20 FIG. 9 is a flow chart illustrating options available to an expert upon receiving a question;

FIG. 10 is a flow chart showing the interaction between the system and an administrator;

FIGs. 11A-J depict a flow chart showing one implementation of the administrator's interaction in detail;

FIG. 12 is an example of how an administrator's home page appears on an administrator's interface;

FIG. 13 represents the menu of guides which are stored on a server and presented by the system to an administrator;

FIGs. 14A-B illustrate an administrator's ability to edit questions and answers for content or for other reasons;

FIG. 15 is a high-level system diagram of a hierarchical configuration of levels, one way in which the current system can be implemented; and

FIG. 16 is a flow chart showing the steps for displaying the proper web page information.

Detailed Description

Reference will now be made in detail to a presently preferred implementation of the invention. Whenever possible, the same reference numbers will be used in the description and the drawings to refer to the same or similar parts.

Systems and methods consistent with the present invention allow users to obtain information on a given subject by interacting with experts on that subject. Users can get answers to their questions either by asking a question or by reviewing answers to questions that others have posed. If asked a question, an expert can either provide an answer or refer the question to another expert.

In one embodiment, users can visit a web site to have their AIDS- and HIV-related questions answered by doctors and other experts in the field. The site provides several benefits

to users. For instance, it lowers barriers between patients and clinicians, demystifies HIV/AIDS and its treatment, improves patients' quality of life, and fosters community through human connection.

The web site is divided into several fora based on subject matter within the broad topic of AIDS- and HIV-related information. Some fora have separate sections for recent questions and archived, or older, questions. Some fora further divide the archived questions into categories by subject matter. Each forum may have its own set of categories.

One possible implementation provides for dynamic management of each forum and of the system itself. If individual forum pages are properly designed, system administrators can make changes to the web site without using a low-level programming language, such as PERL, because system software automatically "manages" the questions and answers. The system itself stores questions and answers, handles categorization, makes the distinction between current and archived questions, allows creation and editing of pages, and manages the experts and their interrelationships.

Dynamic management of the system may be achieved using flexible "templates" instead of standard, fixed HTML documents to create the web pages. These templates may serve as a basis for only one page (e.g., the home page for the treatment forum) or for hundreds of pages (e.g., the layout for the question and answer pages). Templates differ from ordinary HTML pages in that they include commands that return information about parts of the system. These commands take the form of a standard interface to the low-level language (e.g., PERL) part of the system. By using these commands, administrators can change sections of the system easily, quickly, and without having to write or change low-level code.

A. System Overview

Figure 1 depicts an information-sharing system 100 consistent with the present invention. System 100 includes a number of devices such as computers 102, 104, and 106, with client interfaces, computers 108 and 110 with expert interfaces, a computer 112 with an administrator's interface, and server 114. Computers 102, 104, 106, 108, 110, and 112, and server 114 communicate via network 116. Network 116 could be, for example, the Internet, a private network, or any other suitable network. Although Figure 1 shows a specific number of devices, one skilled in the art will recognize that any number of devices could be connected to network 116 without departing from the principles of the present invention.

Figure 2 is a flow chart of one embodiment of a user interface for a system consistent with the present invention. Server 114 presents to the user a series of web pages. In response, the user makes selections via a client interface, e.g., computer 102, which are received by server 114. As shown in figure 2, the user is presented with a Q&A forum page, which offers a choice of fora, including: treatment, fatigue, oral health, infection, safe sex, viral load, mental health, mixed couples, spiritual, and workplace. Once the user selects a forum, a forum page gives the user several options, including ask a question, select a question, and select a category. If the user chooses to ask a question, a new page prompts the user to enter a title, a question, and, in some fora, an expert. If the user chooses to select a category, the user sees a list of questions and chooses which question to read. If the user chooses to select a question, the question and answer are presented to the user.

Figure 3 is an example of what the Q&A forum page can look like. It can include a header, sponsorship information, photos of experts, and a set of options corresponding to the available fora.

Figure 4 is an example of a forum page for the treatment forum as it appears at the user interface. The forum page lists the experts available in a specific forum. Experts can be available in one or more fora simultaneously. This allows users to address a panel of experts or have a more private interaction with a single expert. The forum page presents the user with options such as reading an answered question or adding a new question. These options can be unique to each forum. If the user chooses to read answered questions, server 114 can list the questions or prompt the user to specify a category of questions to list. If the user chooses to ask a question, server 114 displays a page which prompts the user to fill in a question and title. In one embodiment, fora permit a user to select an expert to receive the question.

B. Expert Interfaces

Figure 5 is a flow chart depicting the steps involved with an expert's interaction with the system. The interaction begins when the system receives a question from the user (step 502). The question is input by the user at a client interface, such as computer 102, and transmitted via network 116 to server 114. Once the question is received by server 114, the system routes the question to one of the experts (step 504) at an expert interface, such as computer 110. The system then receives a command from the expert (step 506) via the expert interface. Finally, the system executes the command (step 508) at server 114.

Figures 6A through 6C depict a flow chart showing one implementation of an expert's interaction in detail. The expert is presented with a home page, labeled "Top Level" in figures 6A-C, from which a user can select a specific question to answer, edit existing questions, or quit. As shown in figures 6A and 6B, once the expert selects a question to answer, the expert can then answer the question, refer the question, cross post the question in other fora, or add an attachment. Upon completing the chosen tasks, the expert chooses either post or delete, and is returned to the top level home page. The post command prompts the expert to verify the results and then the question is posted to the appropriate forum. The delete command deletes the question from the system.

Figure 6C shows that, to edit existing messages, the expert first chooses a forum (and category, if appropriate) and then chooses a question and answer to edit. The expert can then edit the answer, cross post the answer to other fora, or add an attachment. When finished, the expert selects the post command, which prompts the expert to verify the results and then the question is re-posted to the appropriate forum. The expert may then choose another forum or return to the top level home page.

Figure 7 is an example of how an expert home page can appear on an expert interface, such as computer 110. It can include the expert's name, a summary of the questions awaiting the expert's attention, an edit option, and a quit option. As shown in figure 7, questions can reach an expert in one of four ways: (1) unanswered questions referred by another expert; (2) previously-answered questions referred by another expert; (3) questions directed to a specific expert by a user; and (4) questions posted by a user with no expert selected. Regardless of the origin of questions, they all appear on the expert's home page. Collecting all of an expert's questions in

this way saves the expert time and effort previously spent visiting several different locations looking for questions.

Figure 8 represents the steps taken by the system to route a question posed by a user to one of the experts (step 504). The system first determines whether the user specified an expert with the question (step 802). The user could have specified an expert while inputting the question at a client interface, such as computer 102. If the user specified an expert with the question, the system routes the question to that expert (step 804) at an expert interface, such as computer 110. If not, the system posts the question in a location on server 114 which is accessible to all experts in the forum (step 806).

Figure 9 is a flow chart illustrating options available to an expert upon receiving a question. First, the expert receives the question at an expert interface, such as computer 110 (step 902). The expert is presented with a four part answer set (steps 904, 906, 908, and 910) that allows him or her to make a variety of choices in answering the question. The expert can go from any part of the set to any other part at any time. In the first part, the expert can answer the question (step 904); in the second part, he or she can assign the question to a forum and/or category (step 906); in the third part, he or she can refer the question to another expert (step 908); and in the last part, he or she can add an attachment to an answer to the question (step 910). Once the expert has completed the chosen task or tasks, he or she exits by specifying that the results be posted. The system then examines whether there was a referral or not (step 912) and whether there was any answer and, if so, whether it is the first one or a supplemental one (steps 914 and 916). Depending on what combination the system finds, it determines that it should do one of the following: simply post the question and answer (step 922), post a supplemental answer

to an existing question (step 924), refer the unanswered question (step 926), post the question and answer and refer it for a supplemental answer (step 928), or post the supplemental answer and also refer it for another supplemental answer (step 930).

5 A benefit of this embodiment is that real-time peer review is provided to experts. Experts in many fields rely on review by their peers to validate their opinions and research. Medical journals provide one avenue for peer review, but the publishing process of medical journals can take months. Second opinions provide another avenue for peer review, and patients frequently get a second opinion before accepting the treatment prescribed by their doctor. But, getting a second opinion can take weeks, during which the patient has to postpone treatment. Real-time peer review speeds up treatment.

10 Experts, including doctors, can post answers to questions and then refer them to other experts for a second (or third or fourth) opinion. Experts can also review answers given by other experts without being asked to do so. Users, including patients, can request that specific experts answer a question and then the users can read comments from other experts on those answers. 15 Using the present invention, this entire review process can occur within hours, or even minutes.

C. Administrator Interface

20 Figure 10 shows the interaction, consistent with the current invention, between a system and an administrator using administrator interface 112. First, an administrator logs into the system via administrator interface 112 (step 1002). The system then presents the administrator with a menu of guides stored on server 114 (step 1004). Each guide consists of a set of choices corresponding to different aspects of a forum within the system. After presenting a menu of guides to the administrator, the system receives a command from the administrator, via

administrator interface 112, selecting a guide (step 1006). The system then presents the guide selected to the administrator at administrator interface 112 (step 1008). Next, the system receives an action command from the administrator, via administrator interface 112, in response to the guide (step 1010). The system then executes the command received (step 1012). The administrator can then choose, via administrator interface 112, to log out (step 1014), or be presented with the menu of guides again, returning to step 1004.

Figures 11A through 11J depict a flow chart showing one implementation of an administrator's interaction in detail. The administrator is presented with a home page, labeled "Top Level," which offers several options, including: configure the system, add or configure a forum, configure a group of either current or archived messages, add or configure a category, add or configure an expert, add or delete an administrator, edit a question or answer, correct a forum manually, view new material, or change the administrator's password.

As Figure 11A shows, when the administrator chooses to configure the system, a configure system page is presented which contains information for the system configuration files and requests new data. The administrator can choose next (to add data), cancel (to return to the home page), or quit (to exit). The page for adding data contains a copy of existing data and the new data. From the add data page, the administrator can choose next, back (return to previous page), cancel (return to home page), or quit (exit). If 'next' is selected, or if no new data is being added, the administrator is prompted to verify the page, after which the finish command makes the appropriate changes and presents the home page.

As shown in Figure 11A, the process is the same for adding a forum as for configuring the system, except that instead of a configure system page, an add forum page is presented which contains forum names, expert selectors, data types and requests new data.

As shown in Figure 11B, the process is the same for configuring a forum as for
5 configuring the system, except that instead of a configure system page, a configure forum page is presented which contains the forum name and inheritance information, and requests new data. Also, from the configure forum page the administrator can choose to delete a forum, which prompts the user to verify the selection and then deletes the forum from the system.

As shown in Figure 11C, the process is the same for configuring a group as for
10 configuring the system, except that instead of a configure system page, the administrator first selects a group and then a configure group page is presented which contains the group data and requests new data.

As shown in Figure 11D, the process is the same for adding a category as for configuring the system, except that instead of a configure system page, an add category page is presented
15 which contains category names, grouping choices, status choices, inheritance information, and requests new data.

As shown in Figure 11E, the process is the same for configuring a category as for
20 configuring the system, except that instead of a configure system page, the administrator first selects a category and then a configure category page is presented which contains category data and requests new data.

As shown in Figure 11F, the process is the same for adding an expert as for configuring the system, except that instead of a configure system page, an add expert page is presented which requests expert names, forum selection, and any new data.

As shown in Figure 11G, the process is the same for configuring an expert as for configuring the system, except that instead of a configure system page, a configure expert page is presented which contains the expert data and requests any new data. Also, from the configure expert page, the administrator can choose to delete an expert, which prompts the user to verify the selection and then deletes the expert from the system.

As shown in Figure 11H, if the administrator chooses to add an administrator, an add administrator page is presented, which requests long and short names and a password. From that page, the administrator can choose add (adds the new administrator and returns to the home page), cancel (returns to the home page), or quit (exit).

As shown in Figure 11H, if the administrator chooses to delete an administrator, a delete administrator page is presented, which prompts the administrator to verify the delete command or return to the home page. Once the command is verified, the administrator to be deleted is removed from the system, and the administrator returns to the home page.

As shown in Figure 11I, if the administrator chooses to edit and question and answer, the administrator then chooses a category and a question and answer. An edit question and answer page is presented which displays the title, question, all answers and attachments, and all relevant forums and categories. The administrator can change the information or delete the question and answer. To change the information, the administrator is prompted to verify and post the question

and answer. To delete, the administrator must verify the command and then the question and answer is deleted.

After deleting a question and answer, or after verifying a question and answer, the administrator returns to the home page.

5 As shown in figure 11J, if the administrator chooses to kill a session, a kill session page is presented which has summary information for each current session and a kill button for each. The administrator can choose to kill a session, to cancel (return to the home page), or to quit (exit). If the kill option is selected, the session is killed and the administrator returns to the home page.

10 Figure 11J also shows that, if an administrator chooses to view additions, a view additions page is presented which has a list of all forums. The administrator selects a forum to view and is presented with that forum which contains flags that show documents under construction.

15 Figure 12 is an example of how an administrator's home page can appear on an administrator's interface, such as computer 112. The home page can include the administrator's name as well as the options available to the administrator, including a quit option.

20 Figure 13 represents the menu of guides, stored on server 114, presented by the system to the administrator via administrator interface 112 in step 1004. The administrator can choose to configure the system (step 1302), add a forum (step 1304) or configure a forum (step 1306), configure a group of either current (step 1308) or archived (step 1310) messages, add (step 1312) or configure (step 1313) a category, add an expert (step 1314) or configure an existing expert (step 1316). Guides are also available to allow the administrator to add an administrator (step

1318) or delete an administrator (step 1320). The administrator has the capacity to edit a question (step 1322) or edit an answer (step 1324). The administrator also has the option to correct a forum manually (step 1326). Finally, the administrator can select the guide to view new material being added to the site (step 1328) or to change that administrator's password (step 1330).

Figures 14A and 14B depict an administrator's ability to edit questions and answers content or for other reasons. The administrator, using administrator interface 112, can either select a question (step 1402) or select an answer (step 1408). If the administrator selects a question (step 1402), the administrator can then choose one of two options via administrator interface 112: (1) edit the question's title (step 1404), or (2) edit the question itself (step 1406). If the administrator selects an answer (step 1408), the administrator can use administrator interface 112 to choose from several options. The administrator can edit the title of an answer (step 1410). The administrator can also choose to edit the answer itself (step 1412). In editing an answer (step 1412), the administrator can choose to add an answer (step 1416) or add an attachment to that answer (step 1418). The administrator can also choose to edit an attachment to an existing answer (step 1414).

D. Dynamic Forum Management

Systems consistent with the present invention can interact with users, experts, and administrators through presenting a series of web pages. Web pages are made up of a number of fields. To display a web page, server 114 must locate the correct data for each field in the web page. Each field has a "name," e.g., <HEADING>, and a "value", e.g., <Answers to Treatment

Questions>. The names and corresponding values are arranged in (name, value) pairs and stored in configuration files (e.g., system.cfg).

One way in which the current system can maintain these configuration files is using a hierarchical configuration of levels. Each level is a collection of configuration files corresponding to a part of the system. To display a web page, the system searches the configuration files at each level. The information found at the lowest level is displayed. This allows the administrator to specify default settings at the highest level while customizing any part of the site by changing the (name, value) pairs at the corresponding level.

Figure 15 is a high-level system diagram of one such hierarchy. The levels are arranged in order of increasing generalization. The highest level of generalization is the system level 1502. At a lower level of generalization than the system level is the forum level 1504. At a lower level of generalization than the forum level is the group level 1506. The groups at level 1506 can be either current or archived. At a lower level of generalization than the archived groups is the category level 1508. It is also possible to have a separate expert level.

When the system is searching for the heading text to be displayed at the top of a page currently in the prevention category of the treatment forum, the system starts at the top (system.cfg) and looks for a "<HEADING>" block. The system then visits each configuration file on the way down the hierarchy (forum.cfg would next in this example). Preferably, the system would use the matching "<HEADING>" block it finds at the lowest level.

Figure 16 is a flow chart showing the steps for displaying the proper web page information. First, the system receives the name to search for (step 1601). If the expert level is specified along with the name (step 1602), the system searches for the value corresponding to the

given name at the expert level of the server (step 1604). The system then returns the value found at that level (step 1612). If the expert level is not specified, the system searches its hierarchical structure for the name and its corresponding value (step 1606). Beginning at the lowest level of generalization (step 1608), the system searches iteratively, moving to the next lowest level of generalization (step 1609) until the name is found. The system then presents the value corresponding to that name (step 1612).

If the levels are arranged in a hierarchical fashion, the administrator can change or create new pages at a certain level of the system by changing the value in the correct configuration file at that level. In addition, configuration files can correspond to each expert in the system, making it possible for the administrator to maintain settings for all experts or for each expert individually.

E. Conclusion

The foregoing description of an implementation of the invention is for illustration and description. It is not intended to be exhaustive or to limit the invention to the precise form disclosed. Modifications and variations are possible in light of the above teachings or may be acquired from practice of the invention.

Claims

What is claimed is:

1. A method, executed by a server, for providing answers on one or more topics from a set of experts on each topic to questions posed by users in communication with client interfaces, the server being in communication with the client interfaces and the set of experts, and the method comprising:

receiving at the server a question received from a user via one of the client interfaces;

routing the question to one of the experts selected using information provided with the question;

receiving a command from the selected expert in response to the question; and

executing the command from the selected expert automatically.

2. The method of claim 1 wherein routing the question to one of the experts includes identifying the selected expert by identification information provided by the user with the question.

3. The method of claim 1 wherein routing the question to one of the experts includes posting the question in a location accessible to the experts.

4. The method of claim 1 wherein receiving a command includes receiving a command to post an answer to the question.

5. The method of claim 4 wherein receiving a command to post an answer includes receiving a command to post the answer in more than one location.
6. The method of claim 1 wherein receiving a command includes receiving a command to refer the question to another one of the experts.
7. The method of claim 1 wherein receiving a command includes receiving a command to post an answer to the question and refer the question to another one of the experts.
8. The method of claim 1 wherein receiving a command includes receiving a command to edit an answer to a previous question.
9. The method of claim 1 wherein attachments relevant to an answer are appended to the answer and wherein receiving a command includes receiving a command to add an attachment to the answer.

10. A method, executed by a server, for modifying the management of separate fora related to corresponding topics, the method comprising:

receiving data identifying a user as an authorized administrator;

presenting to the identified administrator a menu of guides, the guides consisting of a set of choices corresponding to different aspects of a forum;

receiving a selection command from the administrator to select one of the guides;

presenting the selected guide to the administrator;

receiving an action command from the administrator indicating actions to be taken with respect to the selected guide; and

executing the command.

11. The method of claim 10 wherein receiving a selection command includes receiving a command from the administrator selecting the guide to configure the system.

12. The method of claim 10 wherein receiving a selection command includes receiving a command from the administrator selecting the guide to add a new forum.

13. The method of claim 10 wherein receiving a selection command includes receiving a command from the administrator selecting the guide to configure an existing forum.

14. The method of claim 10 wherein at least one of the fora includes a plurality of messages organized as a group, and wherein receiving a selection command includes

receiving a command from the administrator selecting the guide to configure a group of current messages.

15. The method of claim 10 wherein at least one of the fora includes a plurality of messages organized as a group, and wherein receiving a selection command includes

receiving a command from the administrator selecting the guide to configure a group of archived messages.

16. The method of claim 10 wherein at least one of the fora includes a plurality of messages organized as an archived group, and wherein receiving a selection command includes

receiving a command from the administrator selecting the guide to add a category.

17. The method of claim 10 wherein at least one of the fora includes a plurality of messages organized as an archived group and the group is divided into categories based on subject matter and wherein receiving a selection command includes

receiving a command from the administrator selecting the guide to configure a category.

18. The method of claim 10 wherein the fora each correspond to at least one expert and wherein receiving a selection command includes

receiving a command from the administrator selecting the guide to add an expert.

19. The method of claim 10 wherein the fora each correspond to at least one expert, each expert having at least one identifying characteristic, and wherein receiving a selection command includes

receiving a command from the administrator selecting the guide to configure the characteristics of an expert.

20. The method of claim 10 wherein receiving a selection command includes receiving a command from the administrator selecting the guide to add an administrator.

21. The method of claim 10 wherein receiving a selection command includes receiving a command from the administrator selecting the guide to delete an administrator.

22. The method of claim 10 wherein the server receives questions and corresponding answers related to a topic and wherein receiving a selection command includes receiving a command from the administrator selecting the guide to edit a question.

23. The method of claim 10 wherein the server receives questions and corresponding answers related to a topic and wherein receiving a selection command includes receiving a command from the administrator selecting the guide to edit an answer.

24. The method of claim 10 wherein the management of a forum must be corrected manually, and wherein receiving a selection command includes

receiving a command from the administrator selecting the guide to allow the administrator to correct the forum management manually.

25. The method of claim 10 wherein new material is being added to at least one forum and wherein receiving a selection command includes

receiving a command from the administrator selecting the guide to view the new material.

26. The method of claim 10 wherein each administrator has a password used to identify the administrator as such, and wherein receiving a selection command includes

receiving a command from the administrator selecting the guide to change the administrator's password.

27. The method of claim 10 wherein the server receives questions and corresponding answers related to a topic and wherein receiving action commands includes

receiving a command from the administrator to edit a question.

28. The method of claim 10 wherein the server receives questions and corresponding answers related to a topic and wherein receiving action commands includes

receiving a command from the administrator to edit an answer.

29. The method of claim 27 wherein receiving a command from the administrator to edit a question includes

receiving a command from the administrator to edit the title of a question.

30. The method of claim 28 wherein receiving a command from the administrator to edit an answer includes

receiving a command from the administrator to edit the title of an answer.

31. The method of claim 28 wherein attachments responsive to a question are appended to the corresponding answer and wherein receiving a command from the administrator to edit an answer includes

receiving a command from the administrator to edit an attachment appended to that answer.

32. The method of claim 28 wherein receiving a command from the administrator to edit an answer includes

receiving a command from the administrator to add an answer.

33. The method of claim 28 wherein attachments responsive to a question can be appended to the corresponding answer and wherein receiving a command from the administrator to edit an answer includes

receiving a command from the administrator to add an attachment to the answer.

34. A method, executed by a server, for managing the server which has a hierarchical configuration composed of different levels arranged in increasing generalization, the levels consisting of names with corresponding values, the method comprising:

receiving a command to retrieve the value corresponding to a given name;

searching the hierarchical structure of the system for the given name; and

presenting the value found associated with the given name at the least generic level of the system.

35. The method of claim 34 wherein the hierarchical configuration includes a system level at the highest level of generalization.

36. The method of claim 35 wherein the hierarchical configuration includes a forum level at a lower level of generalization than the system level.

37. The method of claim 36 wherein the hierarchical configuration includes a group level at a lower level of generalization than the forum level.

38. The method of claim 37 wherein the hierarchical configuration includes a category level at a lower level of generalization than the group level.

39. The method of claim 34 wherein the server includes an expert level separate from the hierarchical configuration, and wherein receiving a command includes

receiving a command to search for the given name at the expert level.

40. A method for providing answers on one or more topics from a set of experts on each topic to questions posed by users via client interfaces in communication with a server and with the set of experts, the method comprising:

receiving at one of the client interfaces a question on the selected topic;

transmitting the question from the client interface to the server;

routing the question to one of the experts using information provided with the question;

receiving a command at the server from the selected expert in response to the question;

and

executing the command from the selected expert automatically.

41. The method of claim 40 wherein routing the question to one of the experts includes identifying the selected expert by identification information provided by the user with the question.

42. The method of claim 40 wherein routing the question to one of the experts includes posting the question in a location accessible to the experts.

43. The method of claim 40 wherein receiving a command includes receiving a command to post an answer to the question.

44. The method of claim 43 wherein receiving a command includes receiving a command to post an answer in more than one location.

45. The method of claim 40 wherein receiving a command includes receiving a command from the expert to refer the question to another one of the experts.
46. The method of claim 40 wherein receiving a command includes receiving a command to post an answer and refer the question to another one of the experts.
47. The method of claim 40 wherein receiving a command includes receiving a command from the expert to edit an answer to a previous question.
48. The method of claim 40 wherein attachments relevant to an answer are appended to the answer and receiving a command includes receiving a command from the expert to add an attachment to the answer.

49. A server for providing answers on one or more topics from a set of experts on each topic to questions posed by users in communication with client interfaces, the server being in communication with the client interfaces and the set of experts and comprising:

a question receiving component configured to receive at the server a question received from a user via one of the client interfaces;

a routing component configured to route the question to one of the experts selected using information provided with the question;

a command receiving component configured to receive a command from the selected expert in response to the question; and

an executing component configured to execute the command from the selected expert automatically.

50. The system of claim 49 wherein the routing component further comprises an information identifying component configured to identify the selected expert by identification information provided by the user with the question.

51. The system of claim 49 wherein the routing component further comprises a question posting component configured to post the question in a location accessible to the experts.

52. The system of claim 49 wherein the command receiving component further comprises

an answer posting command receiving component configured to receive a command to post an answer to the question.

53. The system of claim 52 wherein the answer posting command receiving component further comprises

a multiple posting command receiving component configured to receive a command to post the answer in more than one location.

54. The system of claim 49 wherein the command receiving component further comprises a referral command receiving component configured to receive a command to refer the question to another one of the experts.

55. The system of claim 49 wherein the command receiving component further comprises an answer-and-refer command receiving component configured to receive a command to post an answer to the question and refer the question to another one of the experts.

56. The system of claim 49 wherein the command receiving component further comprises an edit command receiving component configured to receive a command to edit an answer to a previous question.

57. The system of claim 49 wherein attachments relevant to an answer are appended to the answer and wherein the command receiving component further comprises

an attachment command receiving component configured to receive a command to add an attachment to the answer.

58. A system for modifying the management of separate fora related to corresponding topics and comprising:

a data receiving component configured to receive data identifying a user as an authorized administrator;

5 a menu presenting component configured to present to the identified administrator a menu of guides, the guides consisting of a set of choices corresponding to different aspects of a forum;

a selection command receiving component configured to receive a selection command from the administrator to select one of the guides;

10 a guide presenting component configured to present the selected guide to the administrator;

an action command receiving component configured to receive an action command from the administrator indicating actions to be taken with respect to the selected guide; and

an executing component configured to execute the command.

59. The system of claim 58 wherein the selection command receiving component further comprises

a system configuration command receiving component configured to receive a command from the administrator selecting the guide to configure the system.

60. The system of claim 58 wherein the selection command receiving component further comprises

an add forum command receiving component configured to receive a command from the administrator selecting the guide to add a new forum.

61. The system of claim 58 wherein the selection command receiving component further comprises

a forum configuration command receiving component configured to receive a command from the administrator selecting the guide to configure an existing forum.

62. The system of claim 58 wherein at least one of the fora includes a plurality of messages organized as a group, and wherein the selection command receiving component further comprises

a current group configuration command receiving component configured to receive a command from the administrator selecting the guide to configure a group of current messages.

63. The system of claim 58 wherein at least one of the fora includes a plurality of messages organized as a group, and wherein the selection command receiving component further comprises

an archived group configuration command receiving component configured to receive a command from the administration selecting the guide to configure a group of archived messages.

64. The system of claim 58 wherein at least one of the fora includes a plurality of messages organized as an archived group, and wherein the selection command receiving component further comprises

an add category command receiving component configured to receive a command from the administrator selecting the guide to add a category.

65. The system of claim 58 wherein at least one of the fora includes a plurality of messages organized as an archived group and the group is divided into categories based on subject matter and wherein the selection command receiving component further comprises

a category configuration command receiving component configured to receive a command from the administrator selecting the guide to configure a category.

66. The system of claim 58 wherein the fora each correspond to at least one expert and wherein the selection command receiving component further comprises

an add expert command receiving component configured to receive a command from the administrator selecting the guide to add an expert.

67. The system of claim 58 wherein the fora each correspond to at least one expert, each expert having at least one identifying characteristic, and wherein the selection command receiving component further comprises

an expert configuration command receiving component configured to receive a command from the administrator selecting the guide to configure the characteristics of an expert.

68. The system of claim 58 wherein the selection command receiving component further comprises

an add administrator command receiving component configured to receive a command from the administrator selecting the guide to add an administrator.

69. The system of claim 58 wherein the selection command receiving component further comprises

a delete administrator command receiving component configured to receive a command from the administrator selecting the guide to delete an administrator.

70. The system of claim 58 wherein the server receives questions and corresponding answers related to a topic and wherein the selection command receiving component further comprises

an edit question guide command receiving component configured to receive a command from the administrator selecting the guide to edit a question.

71. The system of claim 58 wherein the server receives questions and corresponding answers related to a topic and wherein the selection command receiving component further comprises

an edit answer guide command receiving component configured to receive a command from the administrator selecting the guide to edit an answer.

72. The system of claim 58 wherein the management of a forum must be corrected manually, and wherein the selection command receiving component further comprises

a manual correct command receiving component configured to receive a command from the administrator selecting the guide to allow the administrator to correct the forum management manually.

73. The system of claim 58 wherein new material is being added to at least one forum and wherein the selection command receiving component further comprises

a view command receiving component configured to receive a command from the administrator selecting the guide to view the new material.

74. The system of claim 58 wherein each administrator has a password used to identify the administrator as such, and wherein the selection command receiving component further comprises

a change password command receiving component configured to receive a command from the administrator selecting the guide to change the administrator's password.

75. The system of claim 58 wherein the server receives questions and corresponding answers related to a topic and wherein the action command receiving component further comprises

an edit question command receiving component configured to receive a command from the administrator to edit a question.

76. The system of claim 58 wherein the server receives questions and corresponding answers related to a topic and wherein the action command receiving component further comprises
an edit answer command receiving component configured to receive a command from the administrator to edit an answer.

77. The system of claim 75 wherein the edit question command receiving component further comprises
an edit question title command receiving component configured to receive a command from the administrator to edit the title of a question.

78. The system of claim 76 wherein the edit answer command receiving component further comprises
an edit answer title command receiving component configured to receive a command from the administrator to edit the title of an answer.

79. The system of claim 76 wherein attachments responsive to a question are appended to the corresponding answer and wherein the edit answer command receiving component further comprises
an edit attachment command receiving component configured to receive a command from the administrator to edit an attachment appended to that answer.

80. The system of claim 76 wherein the edit answer command receiving component further comprises

an add answer command receiving component configured to receive a command from the administrator to add an answer.

81. The system of claim 76 wherein attachments responsive to a question can be appended to the corresponding answer and wherein the edit answer command receiving component further comprises

an add attachment command receiving component configured to receive a command from the administrator to add an attachment to an answer.

82. A server with a hierarchical configuration composed of different levels arranged in increasing generalization, the levels consisting of names with corresponding values, comprising:

a receiving component configured to receive a command to retrieve the value corresponding to a given name;

5 a searching component configured to search the hierarchical structure of the system for the given name; and

a presenting component configured to present the value found associated with the given name at the least generic level of the system.

83. The server of claim 82 wherein the hierarchical configuration includes a system level at the highest level of generalization.

84. The server of claim 83 wherein the hierarchical configuration includes a forum level at a lower level of generalization than the system level.

85. The server of claim 84. wherein the hierarchical configuration includes a group level at a lower level of generalization than the forum level.

86. The server of claim 85 wherein the hierarchical configuration includes a category level at a lower level of generalization than the group level.

87. The server of claim 82 wherein the hierarchical configuration includes an expert level separate from the hierarchical configuration, and wherein receiving a command includes receiving a command to search for the given name at the expert level.

88. A system for providing answers on one or more topics from a set of experts on each topic to questions posed by users via client interfaces in communication with the server, the server comprising:

a question receiving component configured to receive at one of the client interfaces a question on the selected topic;

a transmitting component configured to transmit the question from the client interface to the server;

a routing component configured to route the question to one of a plurality of experts selected using information provided with the question;

a command receiving component configured to receive a command at the server from the selected expert in response to the question; and

an executing component configured to execute the command from the selected expert automatically.

89. The system of claim 88 wherein the routing component further comprises

an information identifying component configured to identify the selected expert by identification information provided by the user with the question.

90. The system of claim 88 wherein the routing component further comprises

a question posting component configured to post the question in a location accessible to the experts.

91. The system of claim 88 wherein the command receiving component further comprises an answer posting command receiving component configured to receive a command to post an answer to the question.

92. The system of claim 91 wherein the answer posting command receiving component further comprises a multiple posting command receiving component configured to receive a command to post an answer in more than one location.

93. The system of claim 88 wherein the command receiving component further comprises a referral command receiving component configured to receive a command from the expert to refer the question to another one of the experts.

94. The system of claim 88 wherein the command receiving component further comprises an answer-and-refer command receiving component configured to receive a command to post an answer to the question and refer the question to another one of the experts.

95. The system of claim 88 wherein the command receiving component further comprises an edit answer command receiving component configured to receive a command from the expert to edit an answer to a previous question.

96. The system of claim 88 wherein attachments relevant to an answer are appended to the answer and the command receiving component further comprises

an add attachment command receiving component configured to receive a command from the expert to add an attachment to the answer.

Abstract

A method, executed by a server, for providing answers on one or more topics from a set of experts on each topic to questions posed by users. Users can direct questions to one or more specific experts, who in turn can answer the questions, refer the questions to other experts, or both. The server automatically organizes and stores questions and answers in various fora. An administrator can take advantage of the design of the system to create or change a forum without having to write or change low-level code.

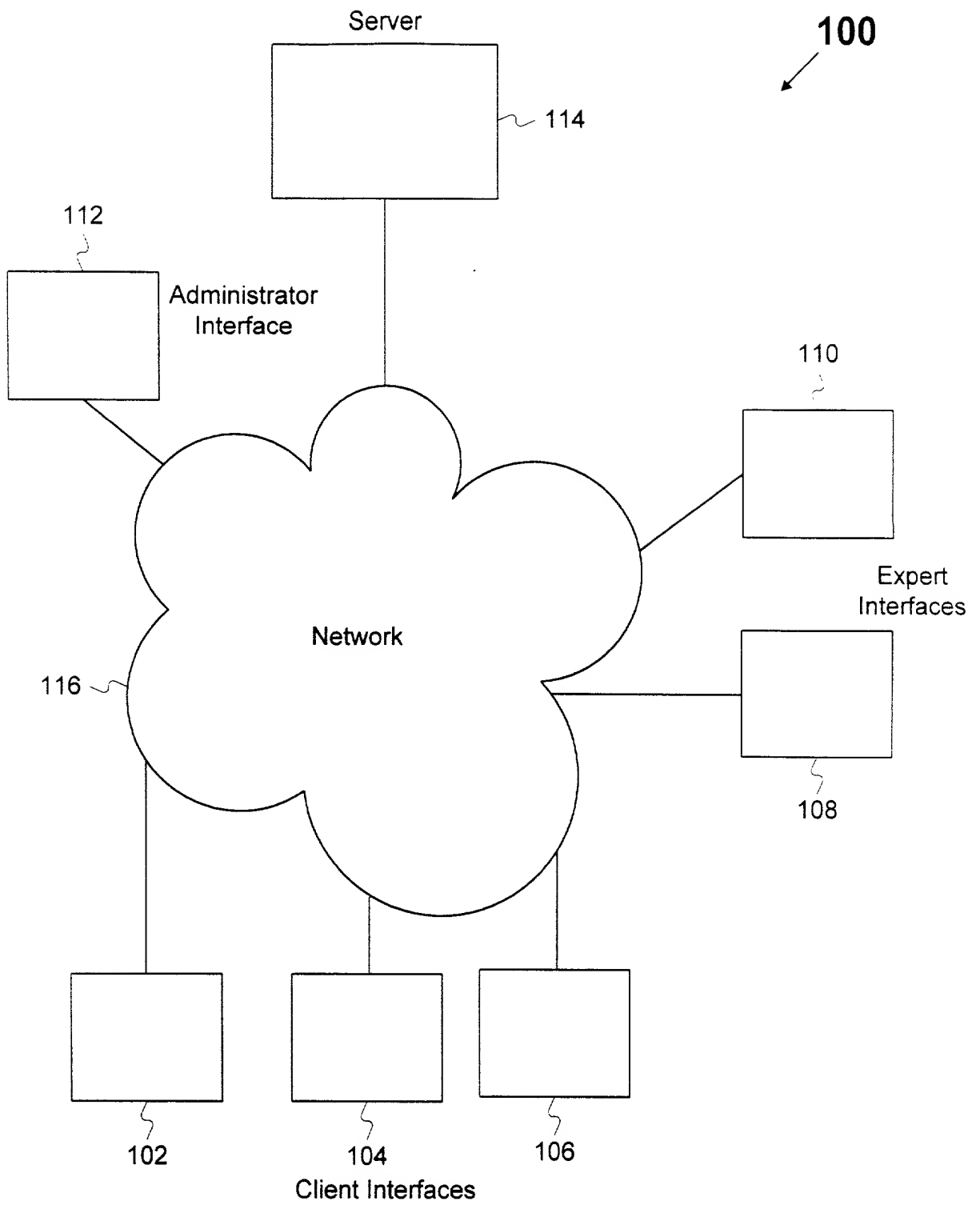


FIG. 1

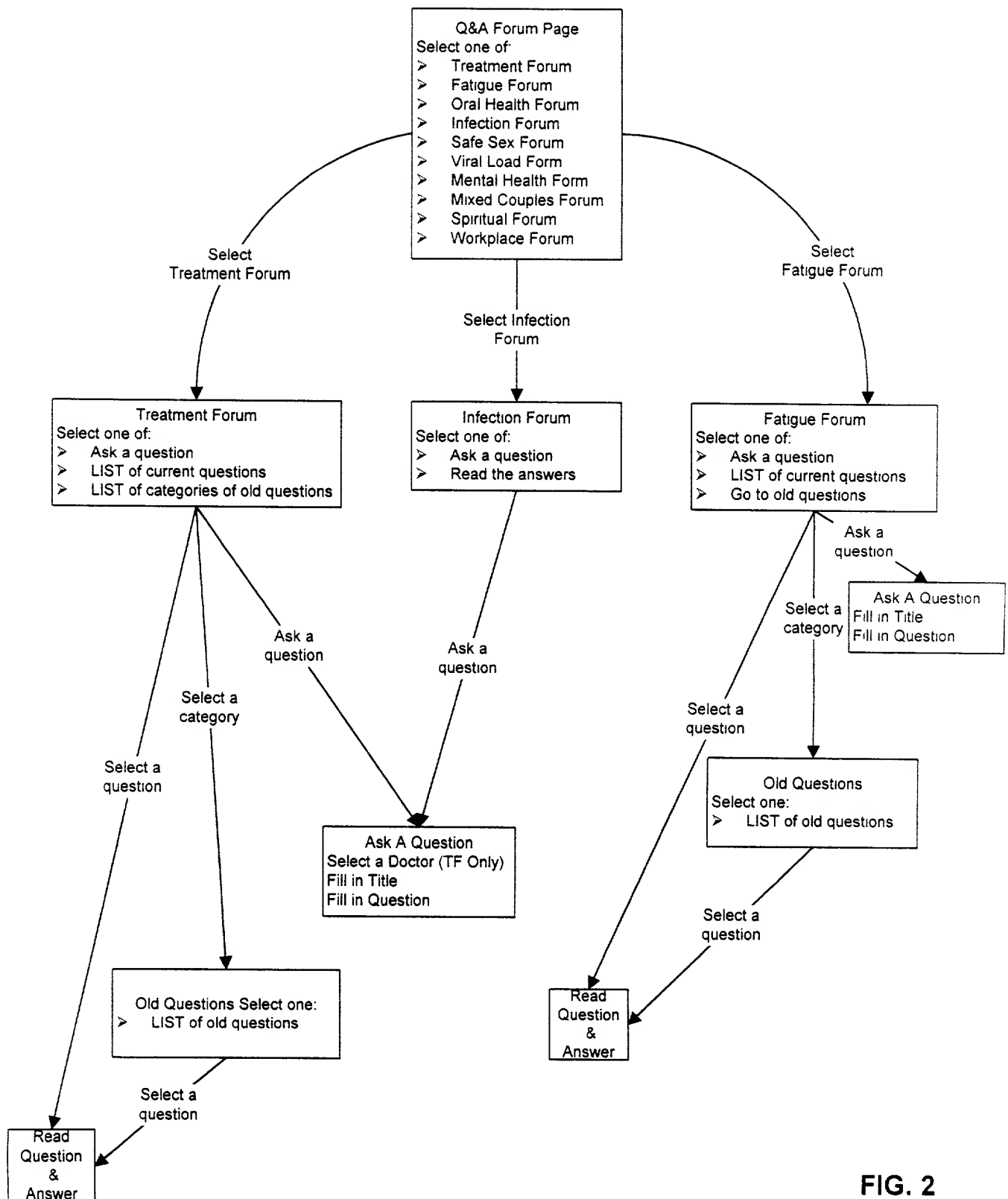


FIG. 2



Learn From Experts

HOME

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Prevention and
Transmission
with
Rick Sowadsky, MSPH

Workplace Issues
with
Nancy Breuer
Lynn L. Franzoi



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Welcome to The Body's Treatment Forum. We are pleased to feature three outstanding HIV/AIDS specialists to answer your treatment questions: [Cal Cohen, M.D., M.S.](#), [Judith S. Currier, M.D., M.Sc.](#), and [Andrew T. Pavia, M.D.](#)



[Cal Cohen, M.D., M.S.](#)
Harvard Medical
School



[Judith S. Currier, M.D., M.Sc.](#)
University of
California, Los Angeles
School of Medicine



[Andrew T. Pavia, M.D.](#)
University of Utah
School of Medicine

From the beginning of the epidemic, these specialists have worked extensively with HIV/AIDS patients, either heading major American AIDS clinics or research facilities; they also see patients and teach other physicians. We invite you to draw on their exceptional expertise in HIV/AIDS treatment issues.



[Read answered questions](#) | [Add your question to the list.](#)

Worried if you are infected? Have a question on transmission/exposure/safe sex? [Click here.](#)

Please Note: Due to volume considerations, not all questions can be answered. Questions most likely to be answered will be those of general interest to a broad group of visitors to this forum. Questions pertaining to a specific case; requests for diagnosis, medical advice or second opinion; or requests for opinions about untested alternative therapies will generally not be answered.

Before posting a question, please read through [recently answered questions](#) below and [answers archived by category](#) at the end of this page. The doctors have already responded to a variety of questions and you may discover several that address your concerns.

For questions related to transmission or testing, please see [The Body's Forum on Safe Sex and HIV Prevention](#). For questions on fatigue and/or anemia, please see [The Body's Forum on Fatigue and Anemia](#). For questions on viral load and resistance testing, please see [The Body's Forum on Viral Load and Resistance Testing](#). The participation of Drs. Cal Cohen and Judith Currier in this Treatment Forum is made possible by unrestricted educational grants from Bristol-Myers Squibb Immunology, Roxane Laboratories, Inc., and Merck & Co., Inc.

Answers to Recent Treatment Questions:

- [HIV and malaria, yellow fever vaccine](#) (November 19, 1999)
- [TESTING FOR ILLEGAL DRUGS](#) (November 19, 1999)

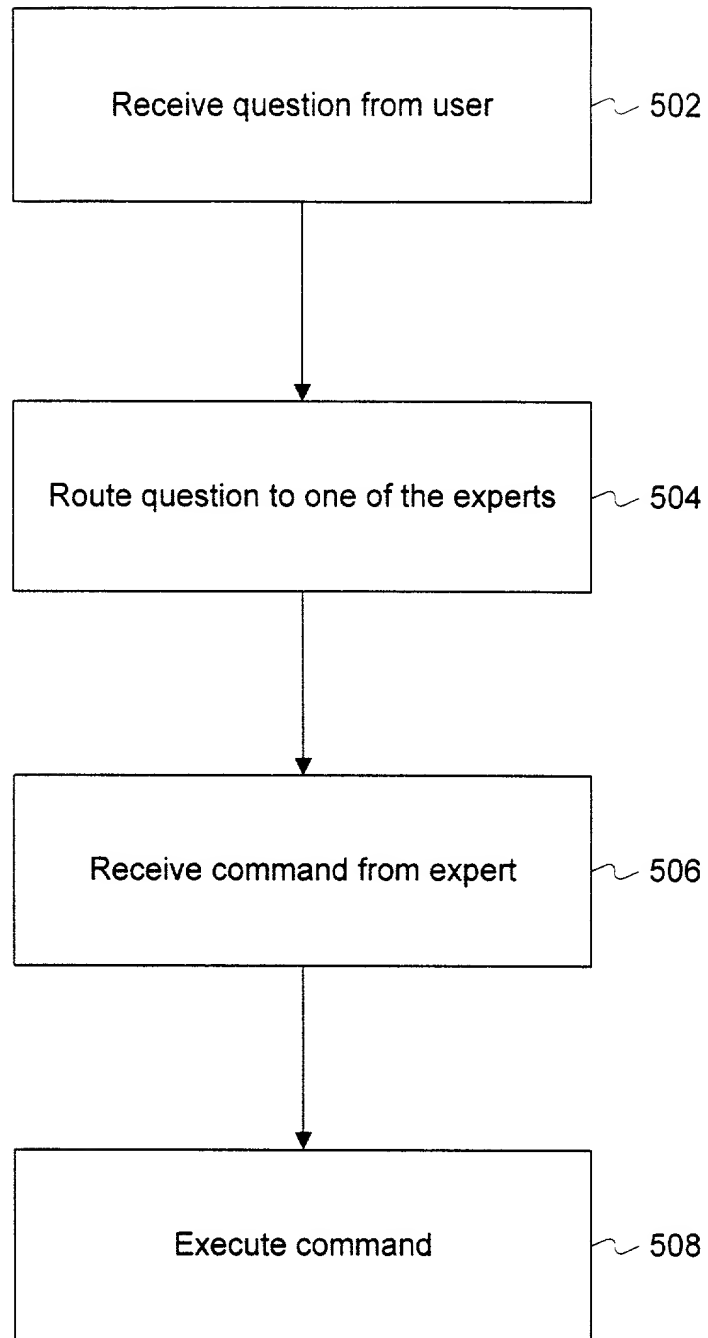


FIG. 5

FIG. 6A

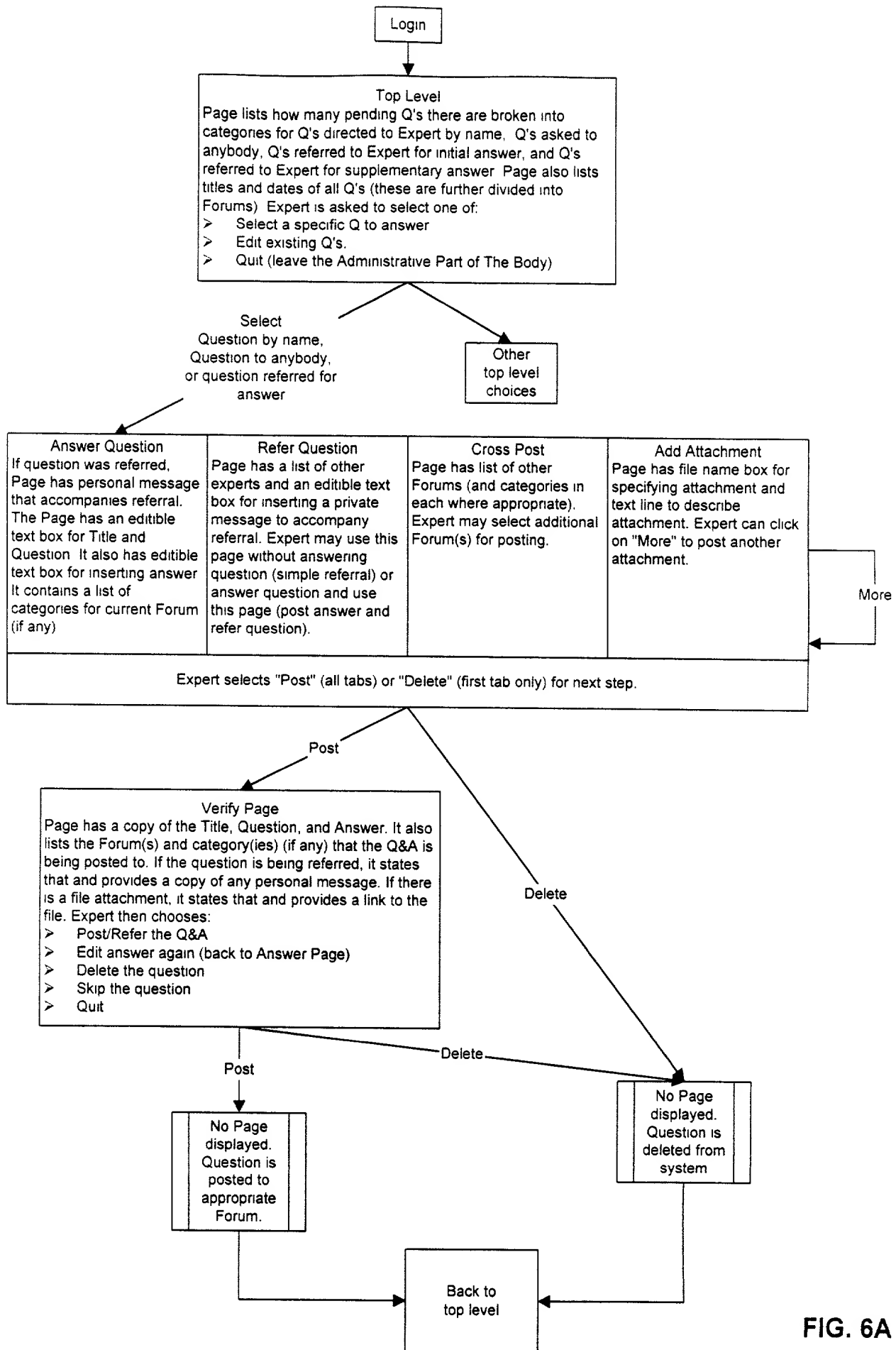


FIG. 6A

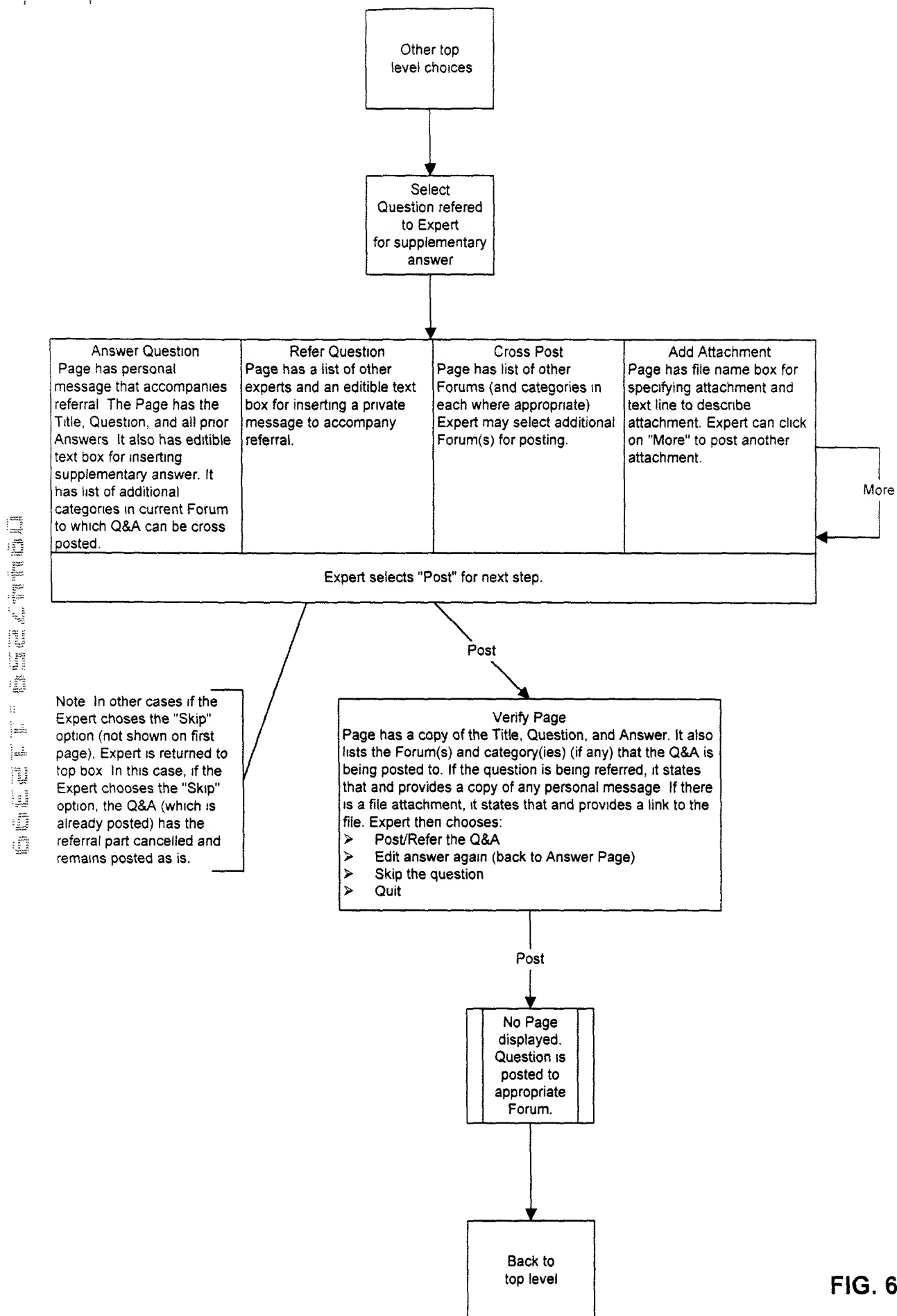


FIG. 6B

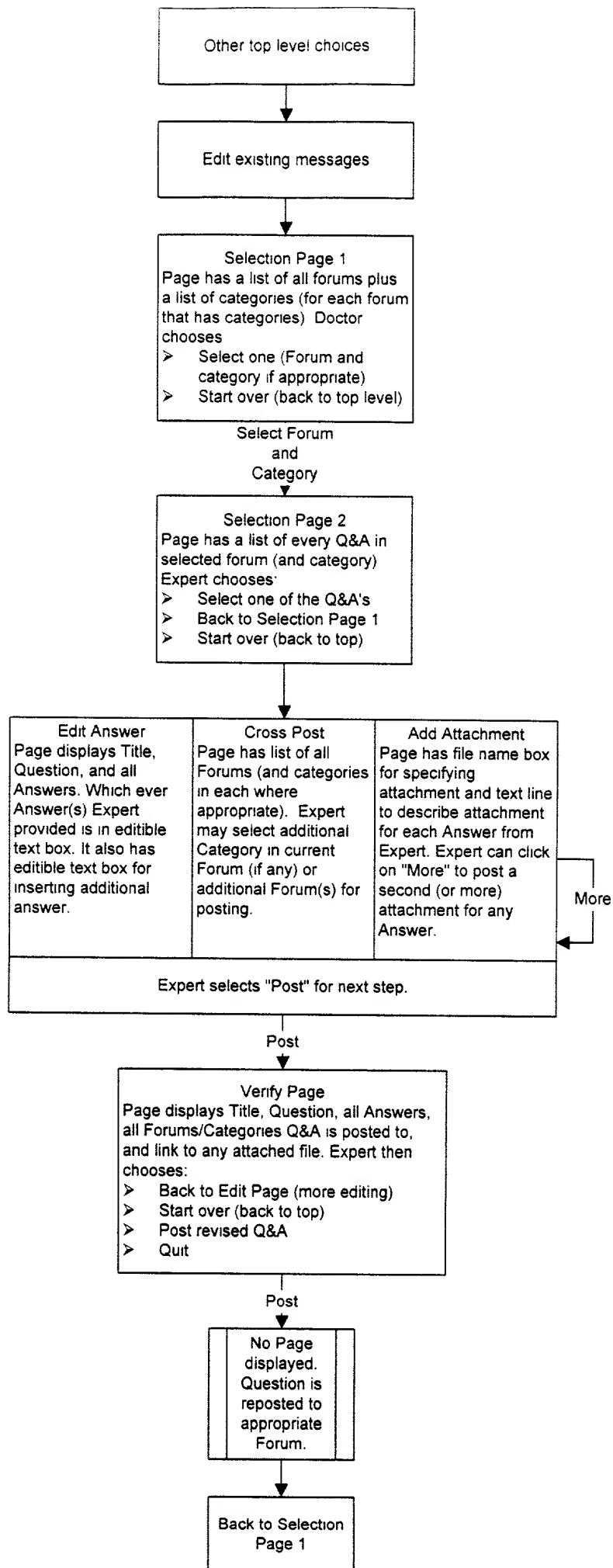


FIG. 6C



Hello, Dr. Cohen! There are currently **1118** question(s) awaiting answers from you. Please choose one of the following:

REFER

Answer one or more of **10** questions referred to you by your colleagues.

SUPPLEMENT

Provide a supplementary answer to one or more of **3** questions and answers referred to you by your colleagues.

FOR ME

Answer one or more of **105** questions directed to you from the public through the Treatment Forum.

GENERAL

Answer one or more of the **1000** questions directed to any doctor from the public through the Treatment Forum.

Or else select one of the following options:

EDIT

Edit your answers to previous questions.

QUIT

Quit the administrative center and return to the public portion of The Body.

Questions referred to you by your colleagues:

Questions sent to any doctor from the public at the Treatment Forum

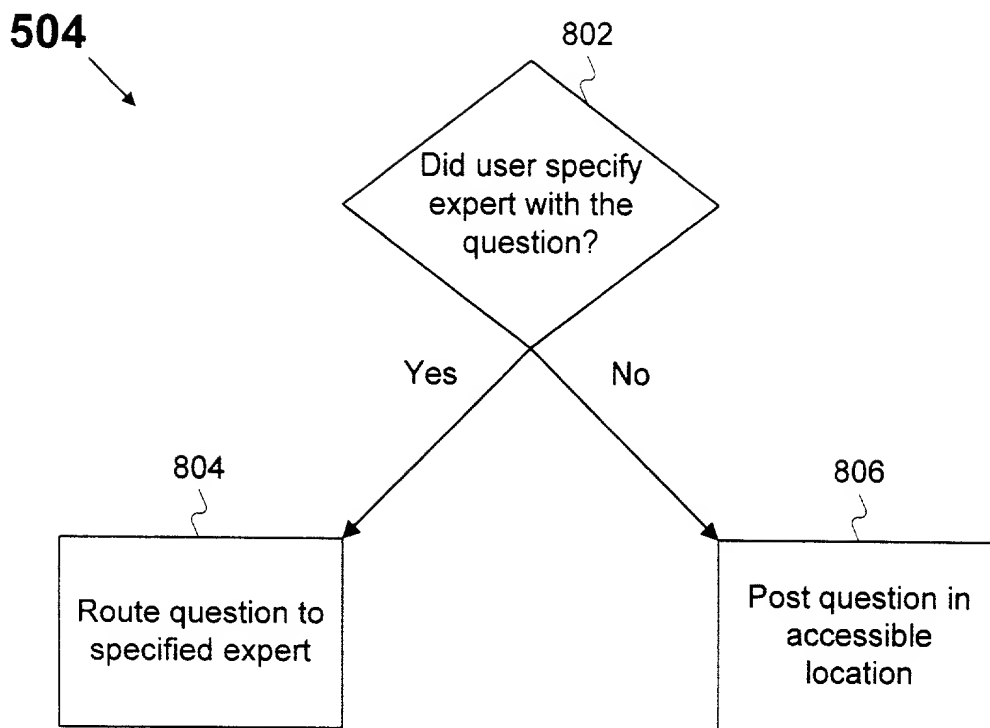


FIG. 8

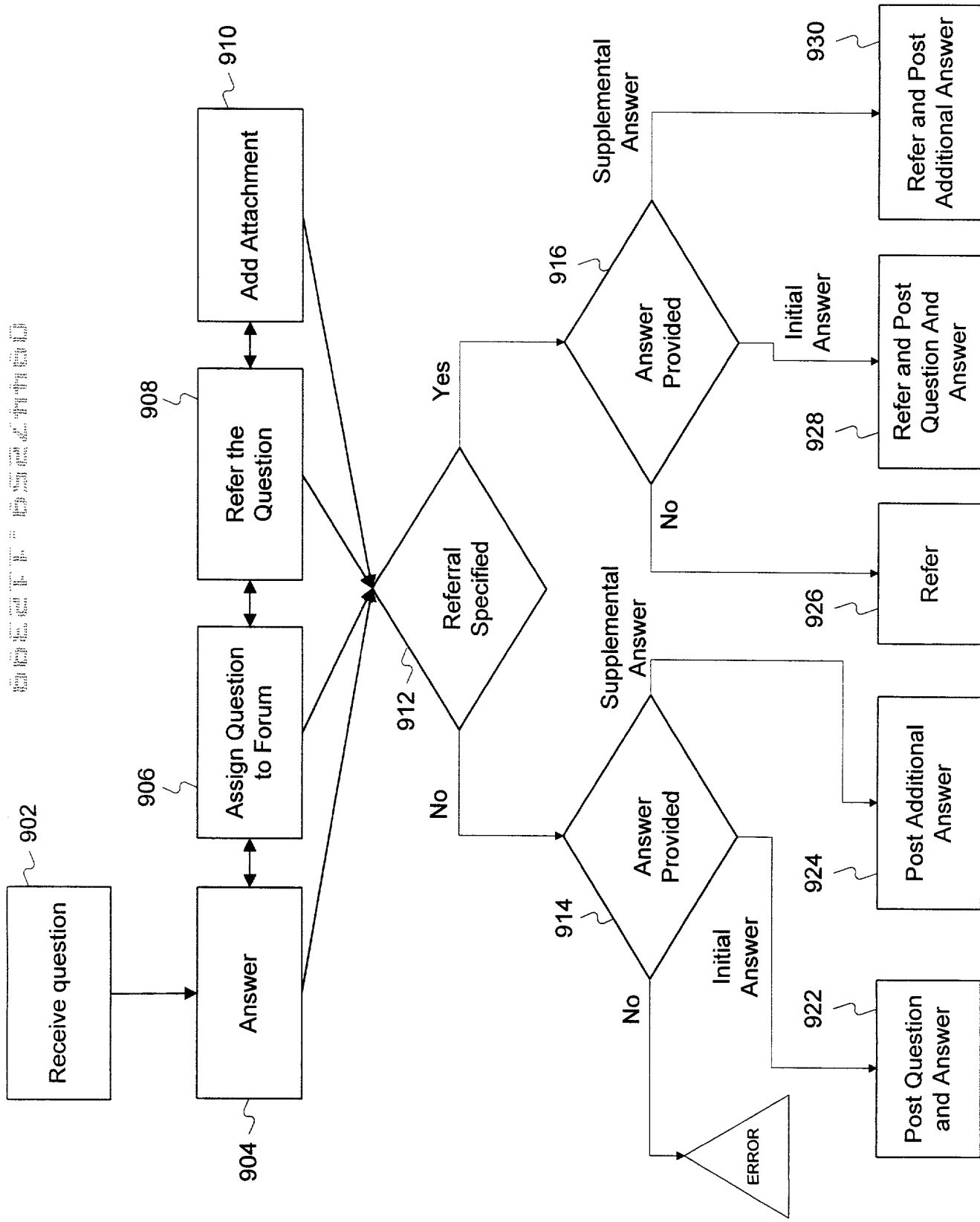


FIG. 9

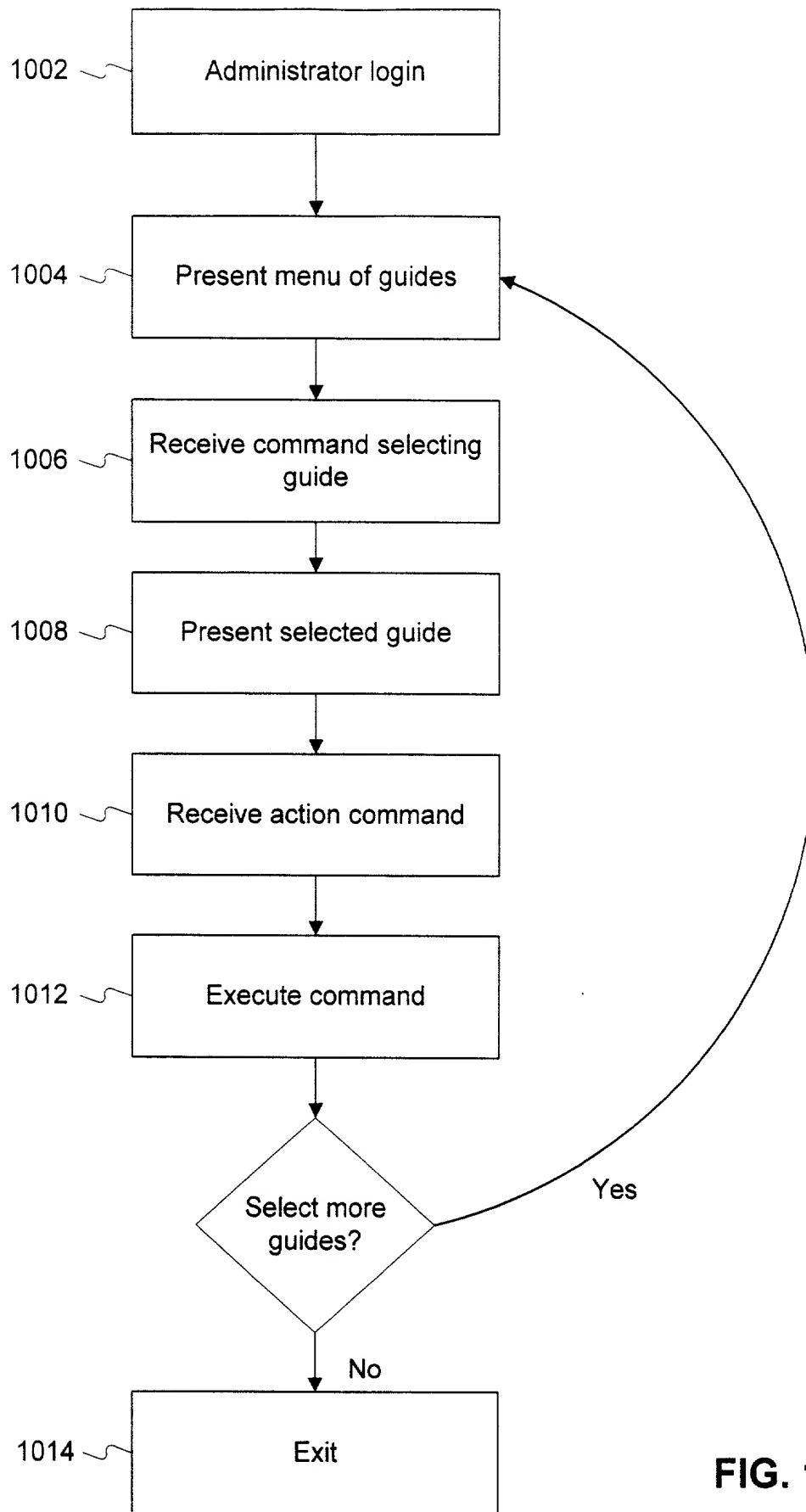


FIG. 10

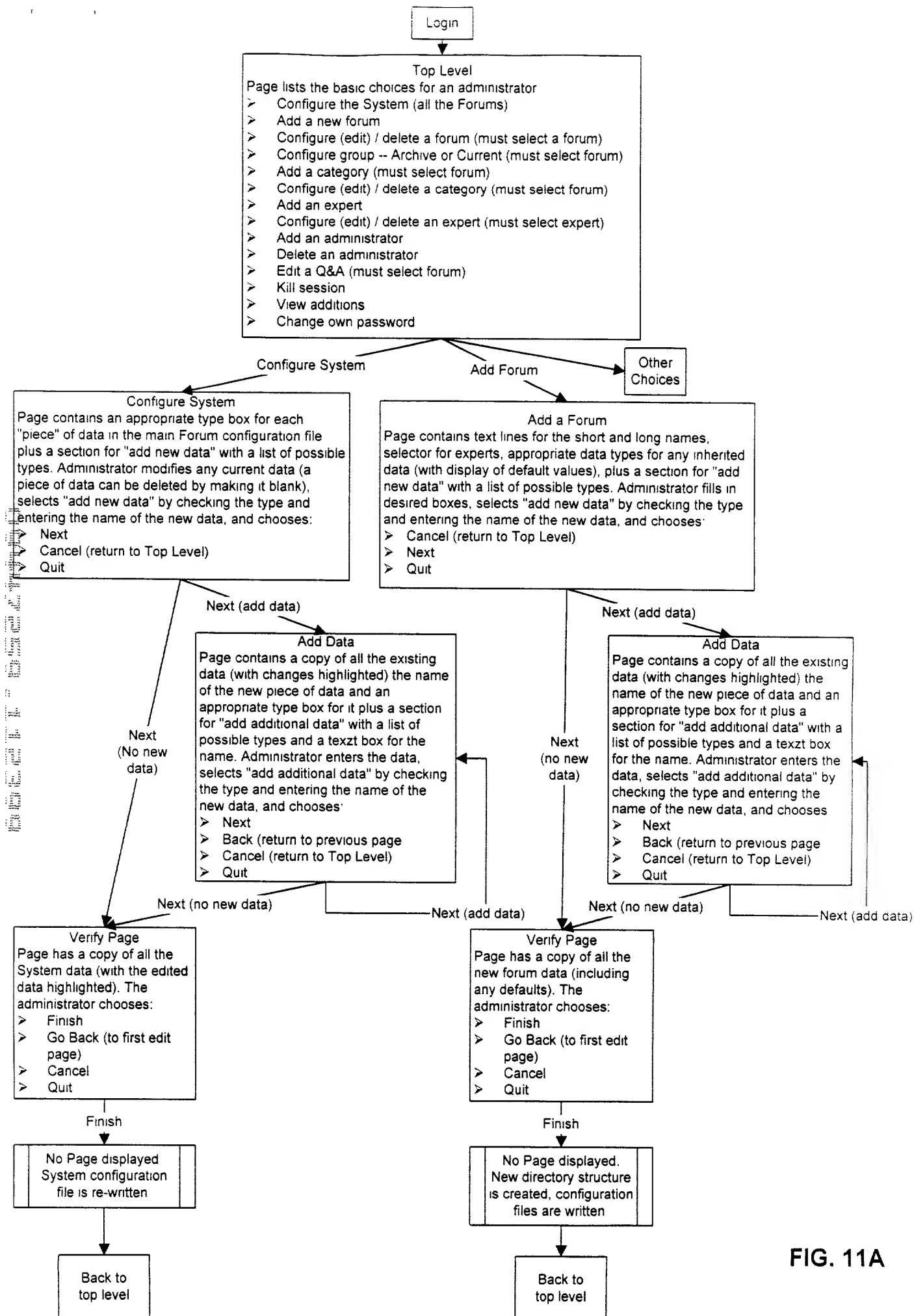


FIG. 11A

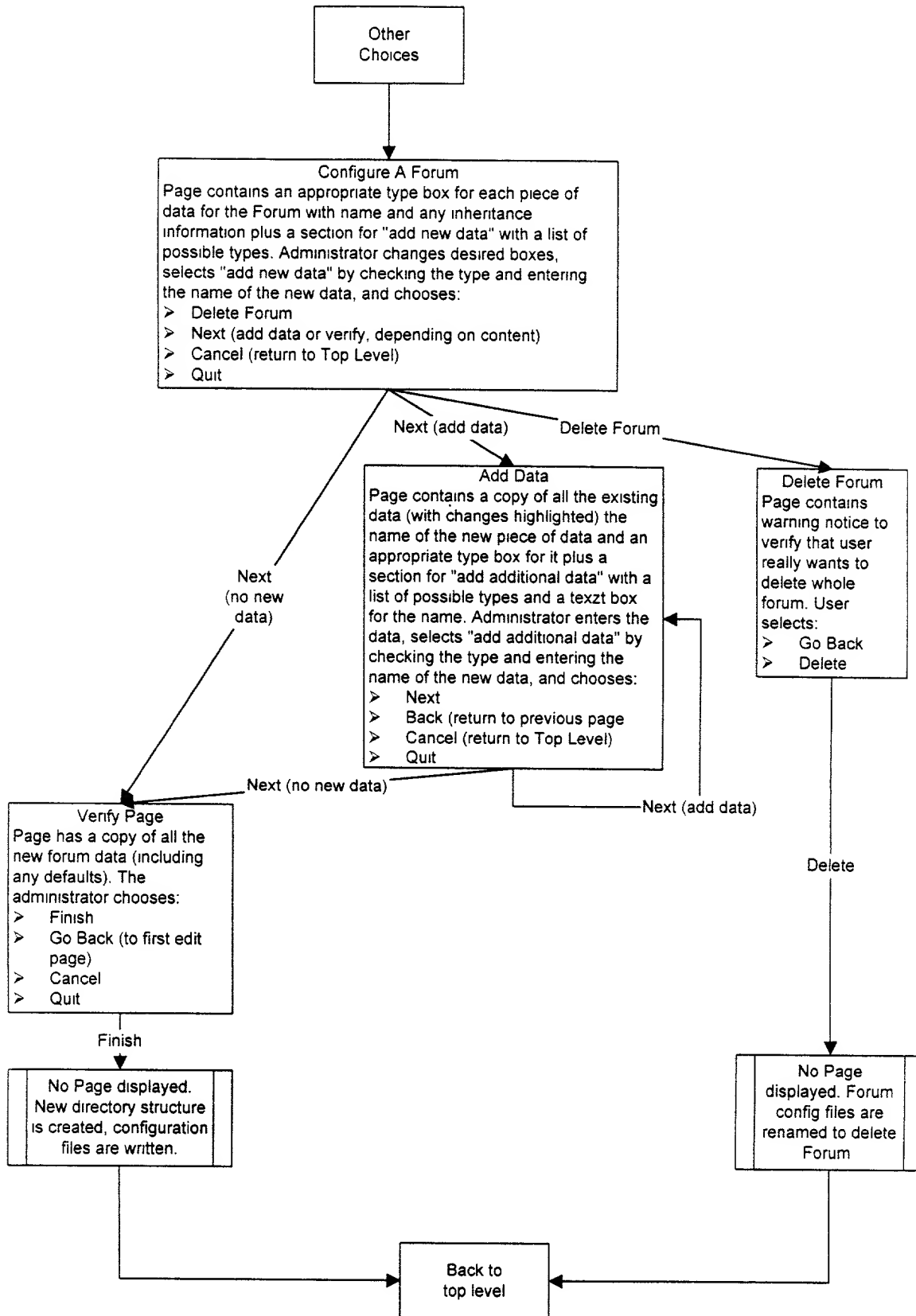


FIG. 11B

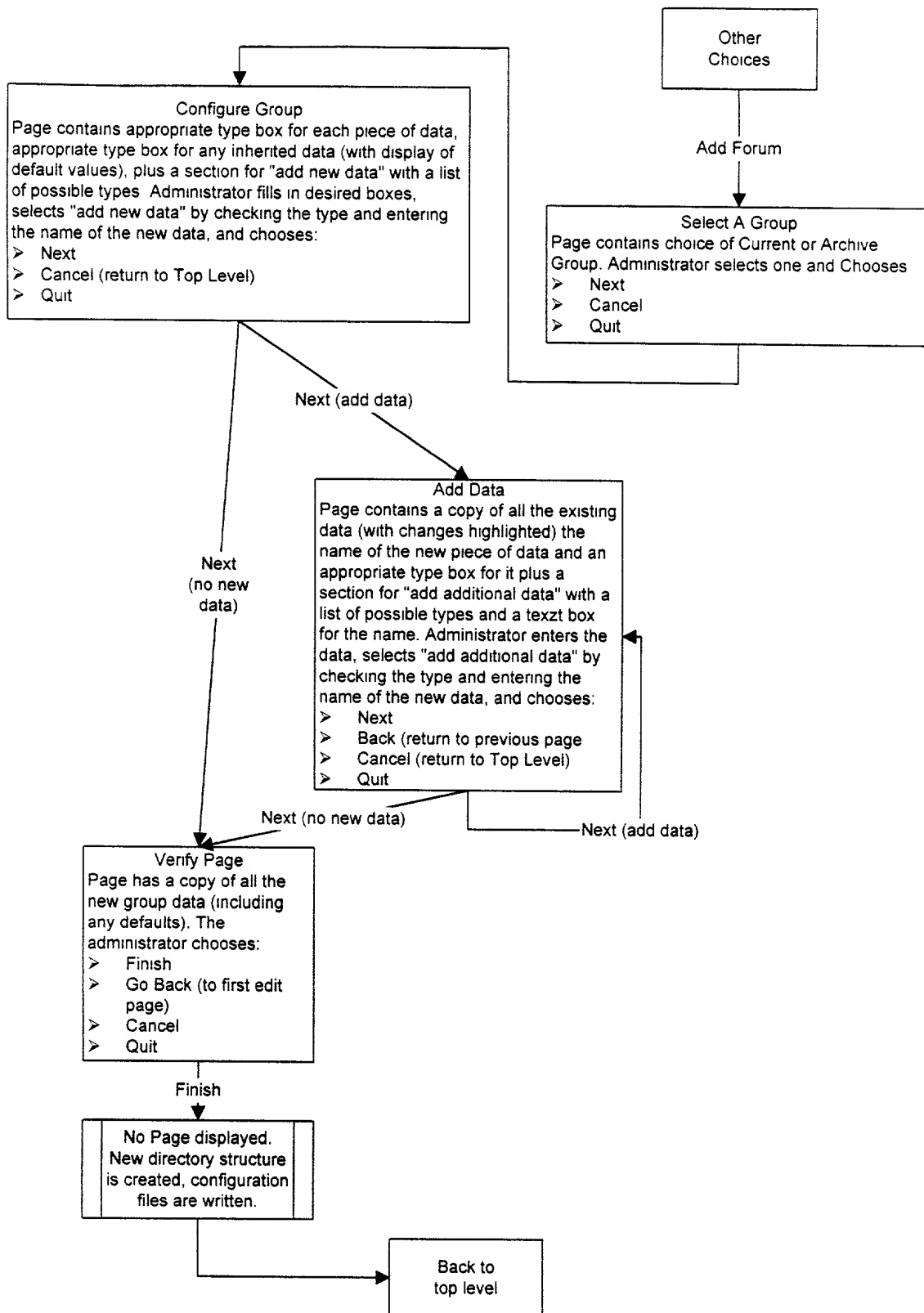


FIG. 11C

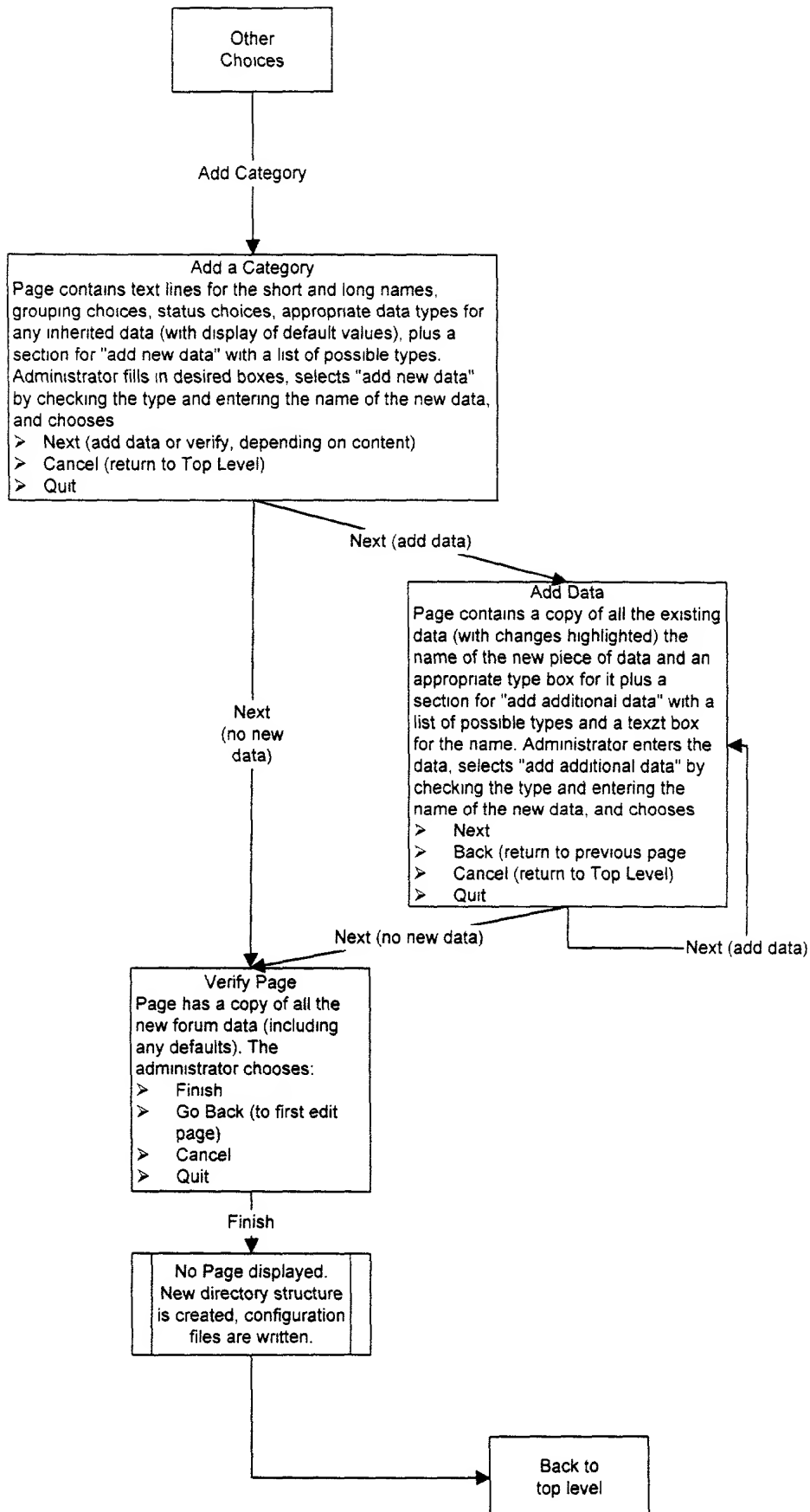


FIG. 11D

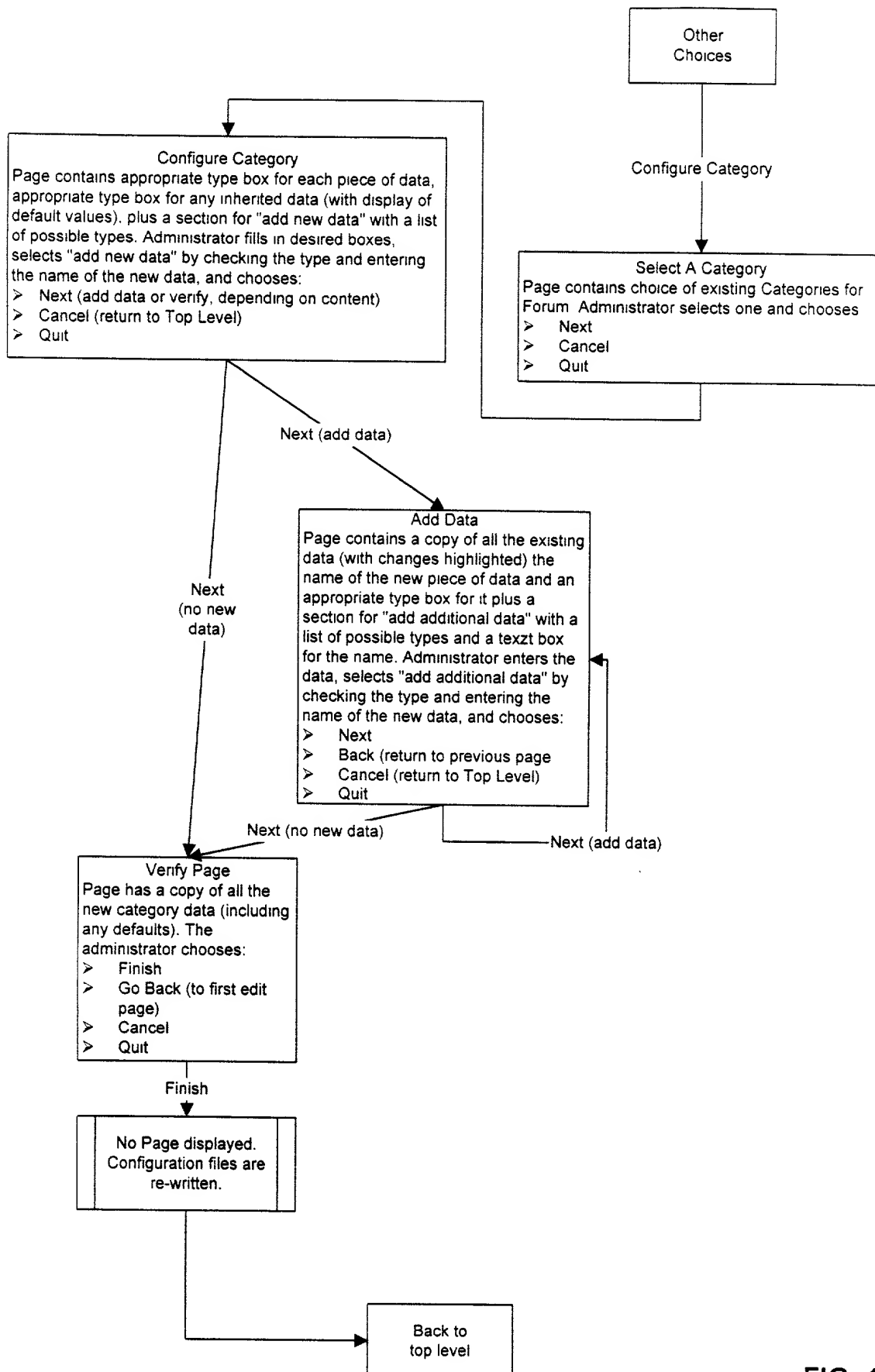


FIG. 11E

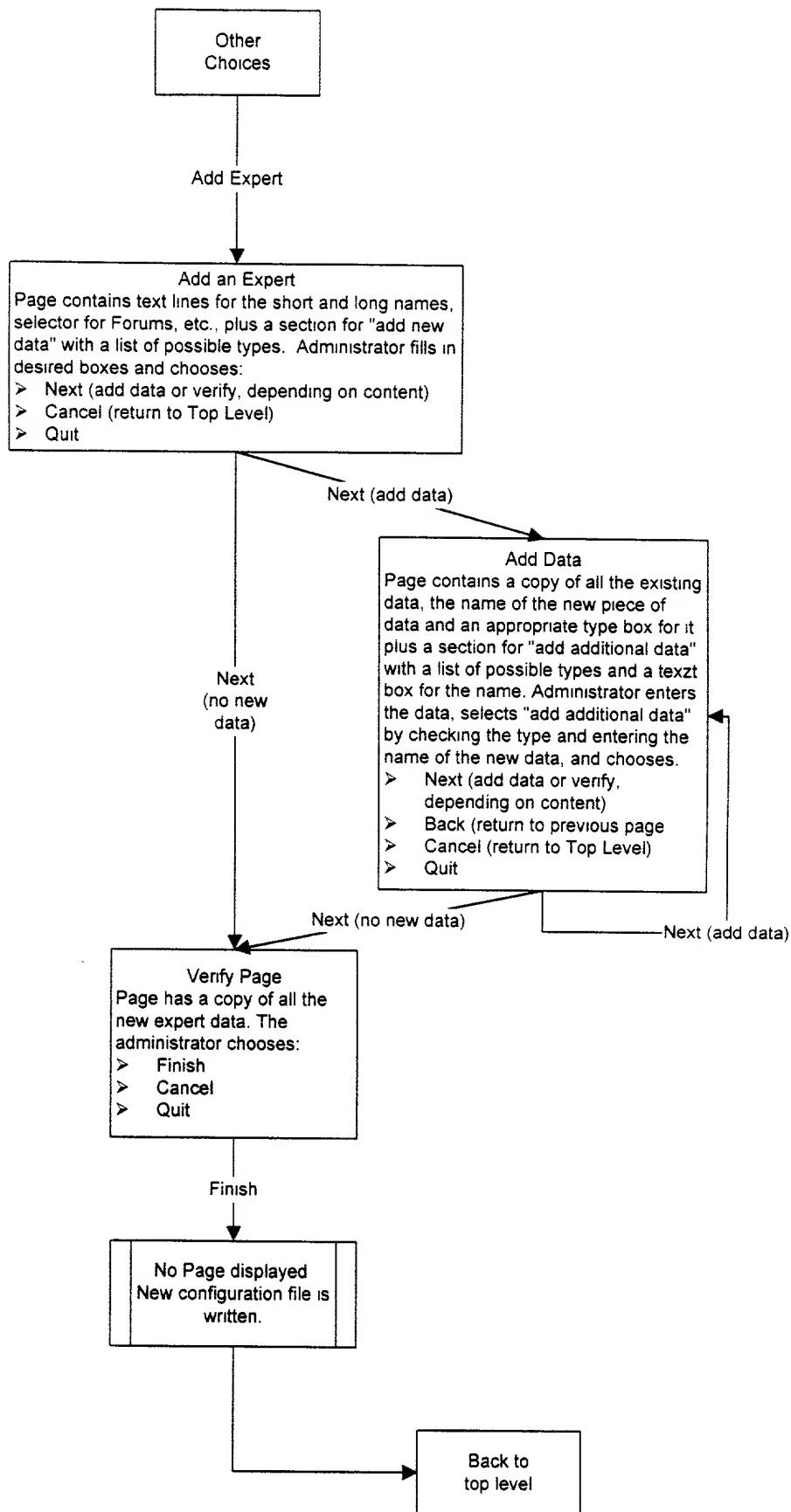


FIG. 11F

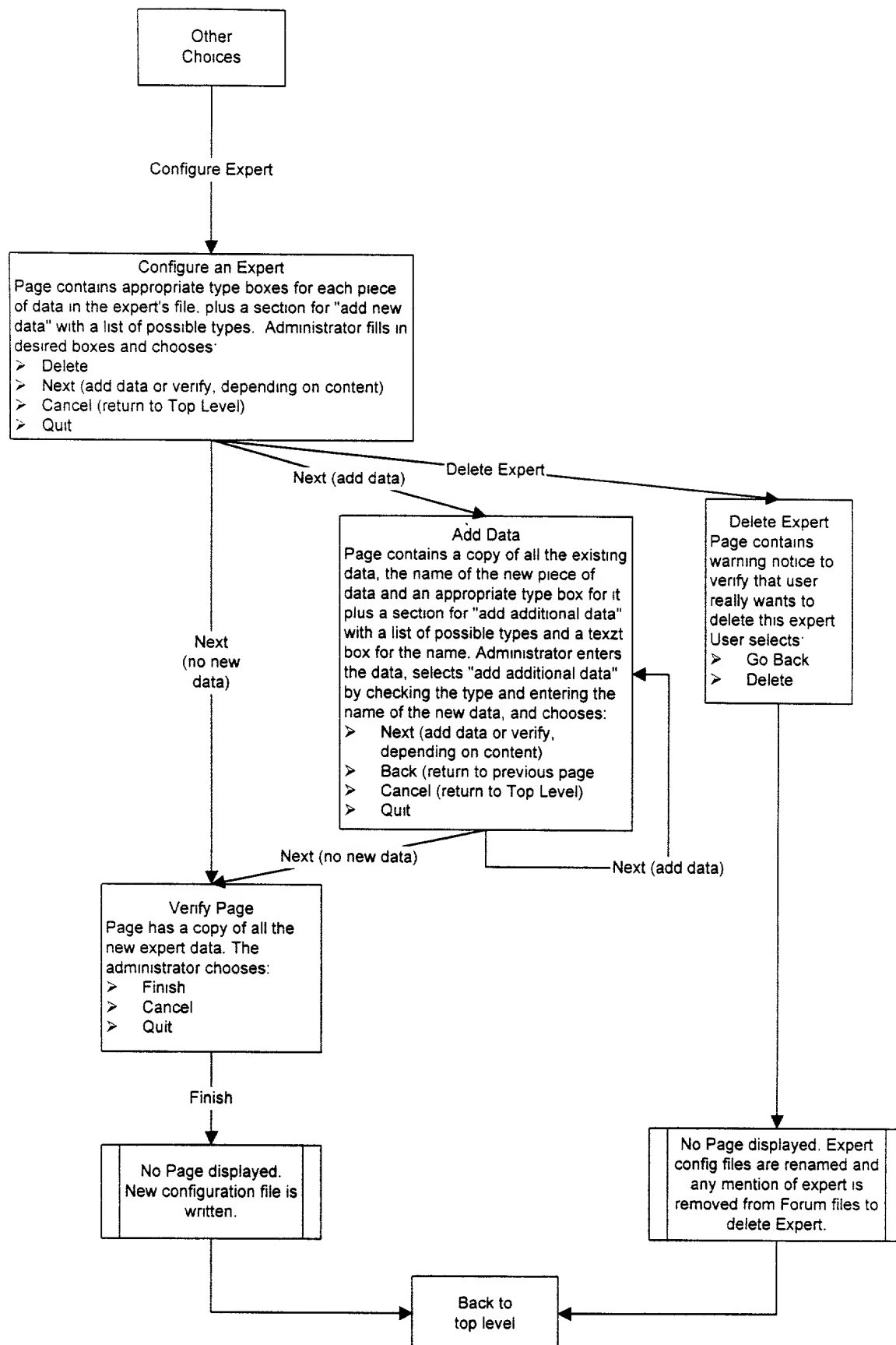


FIG. 11G

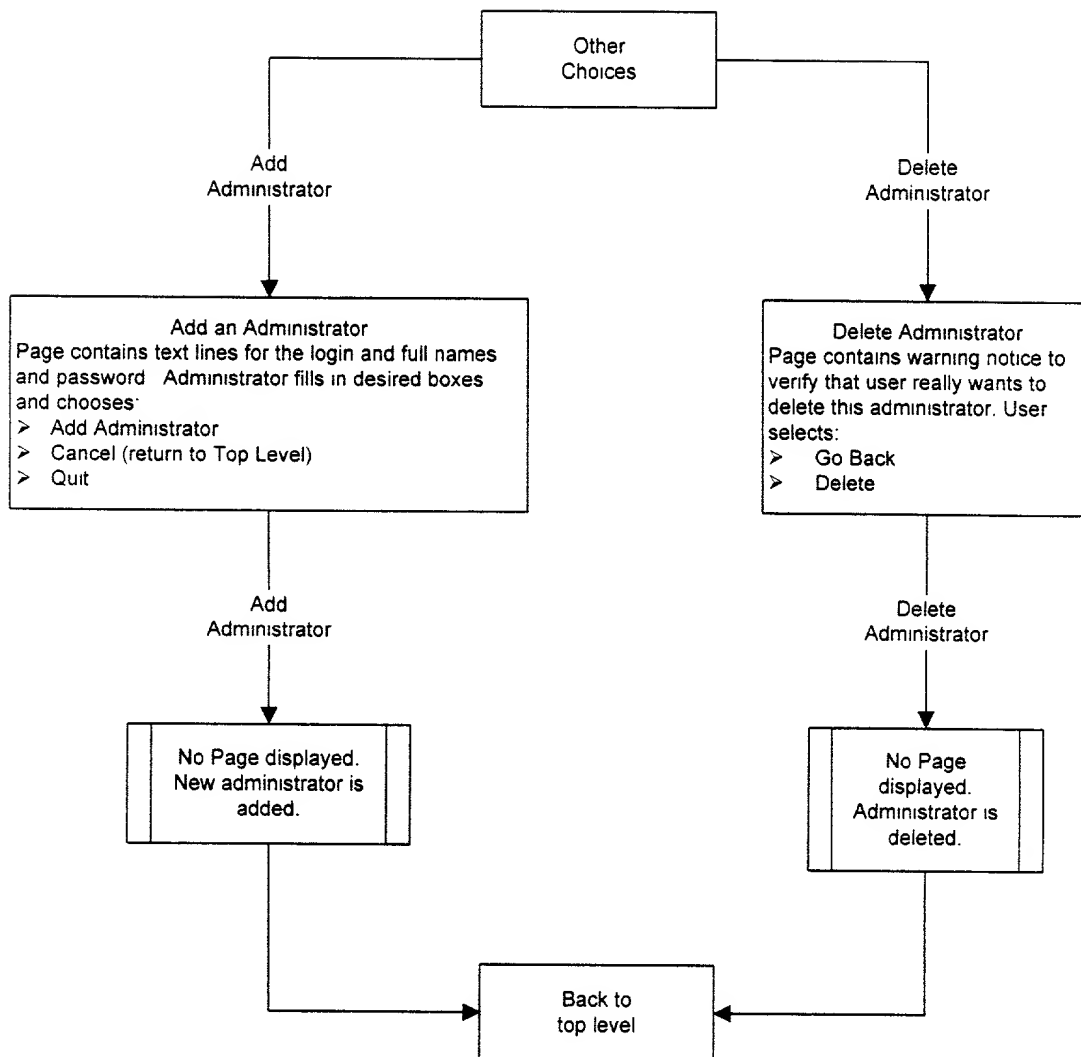


FIG. 11H

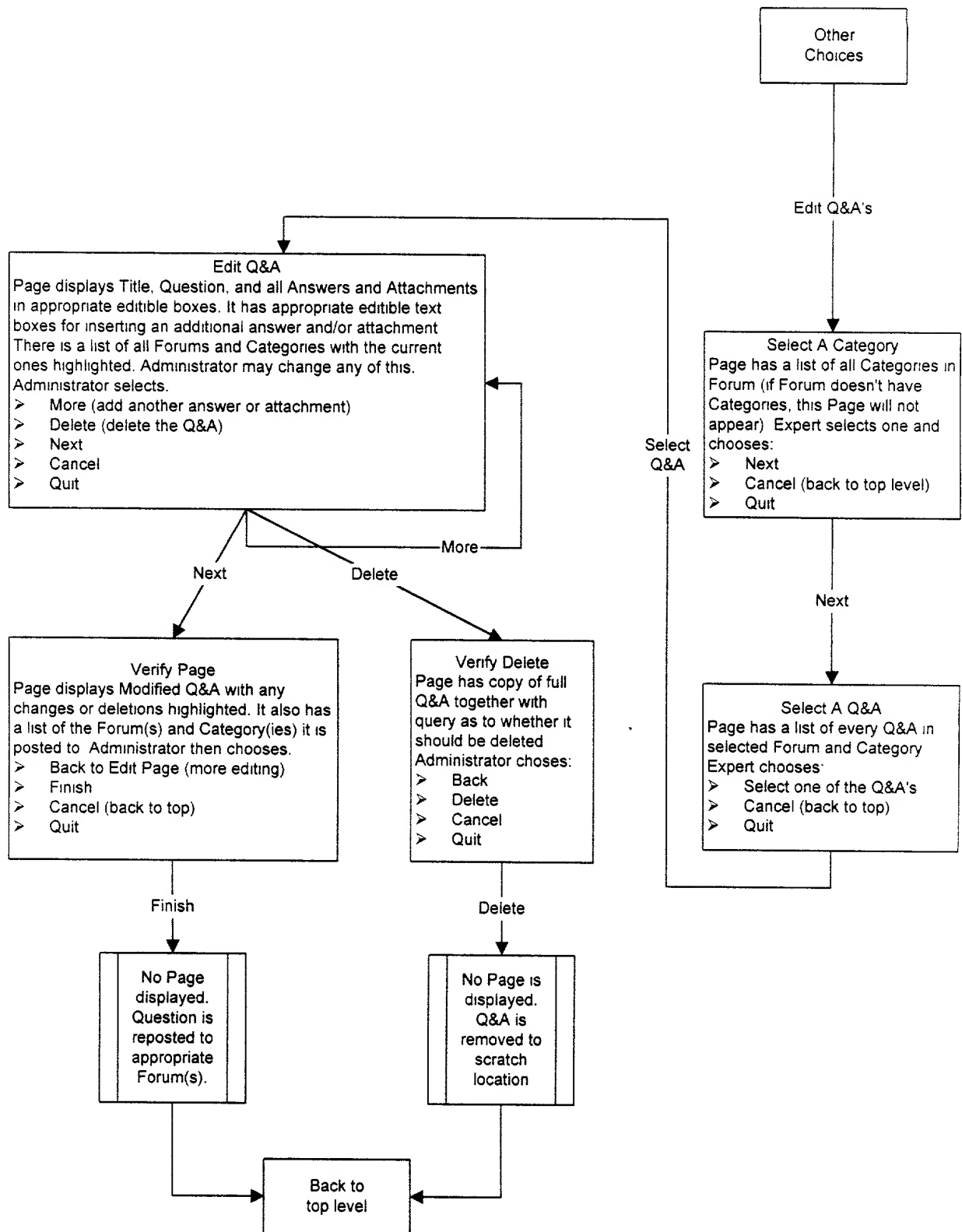


FIG. 11I

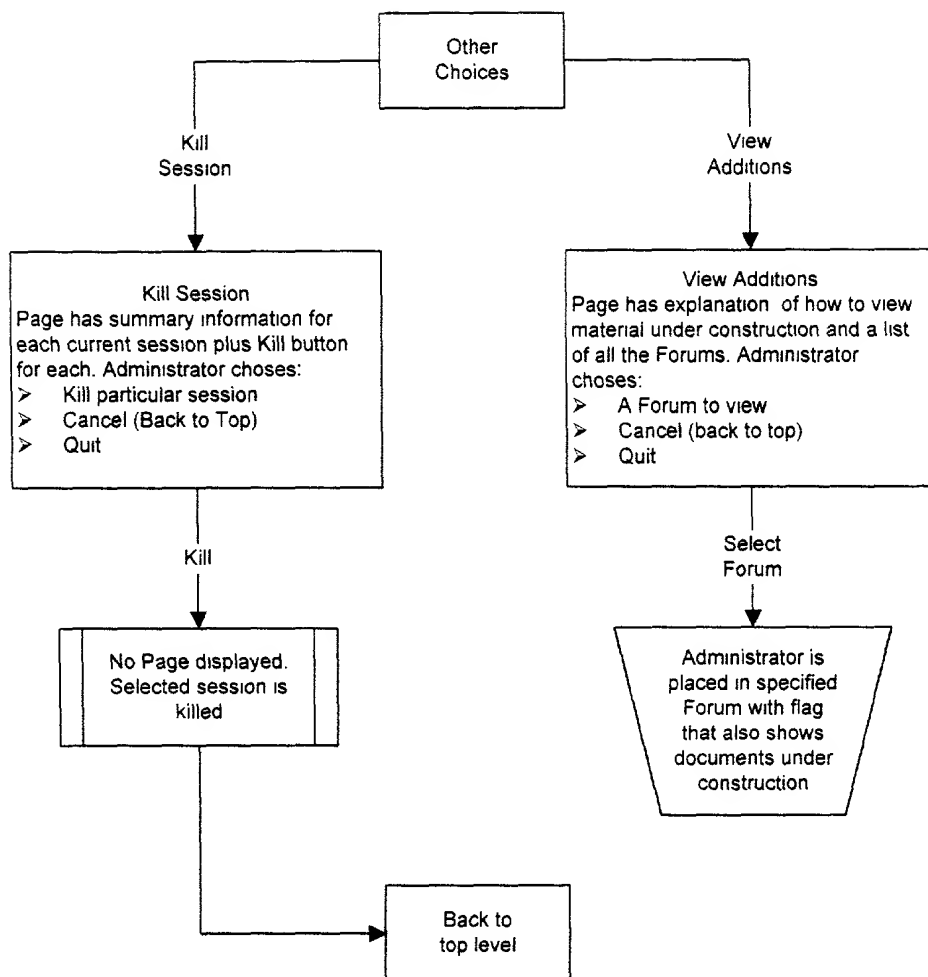


FIG. 11J



General Operations

Operations On a Specific Forum

CONFIGURE SYSTEM

Configure
Whole System

Select A Forum To Work On



ADD FORUM

Add A New Forum

CONFIGURE FORUM

Configure (Edit)
A Forum

KILL SESSION

Kill A Session

CONFIGURE GROUP

Configure Group
(Archive or Current)

VIEW ADDITIONS

View Additions

ADD CATEGORY

Add A Category

CONFIGURE CATEGORY

Configure (Edit)
Category

Personnel Operations

ADD ADMINISTRATOR

Add an
Administrator

EDIT Q&A

Edit Question
And Answer

ADD EXPERT

Add an Expert.

Change My Password

Select An Expert For Edit



Old Password: _____

EDIT EXPERT

Edit / Delete
This Expert.

New Password: _____

Select An Administrator For Deletion



New Password:
(again): _____

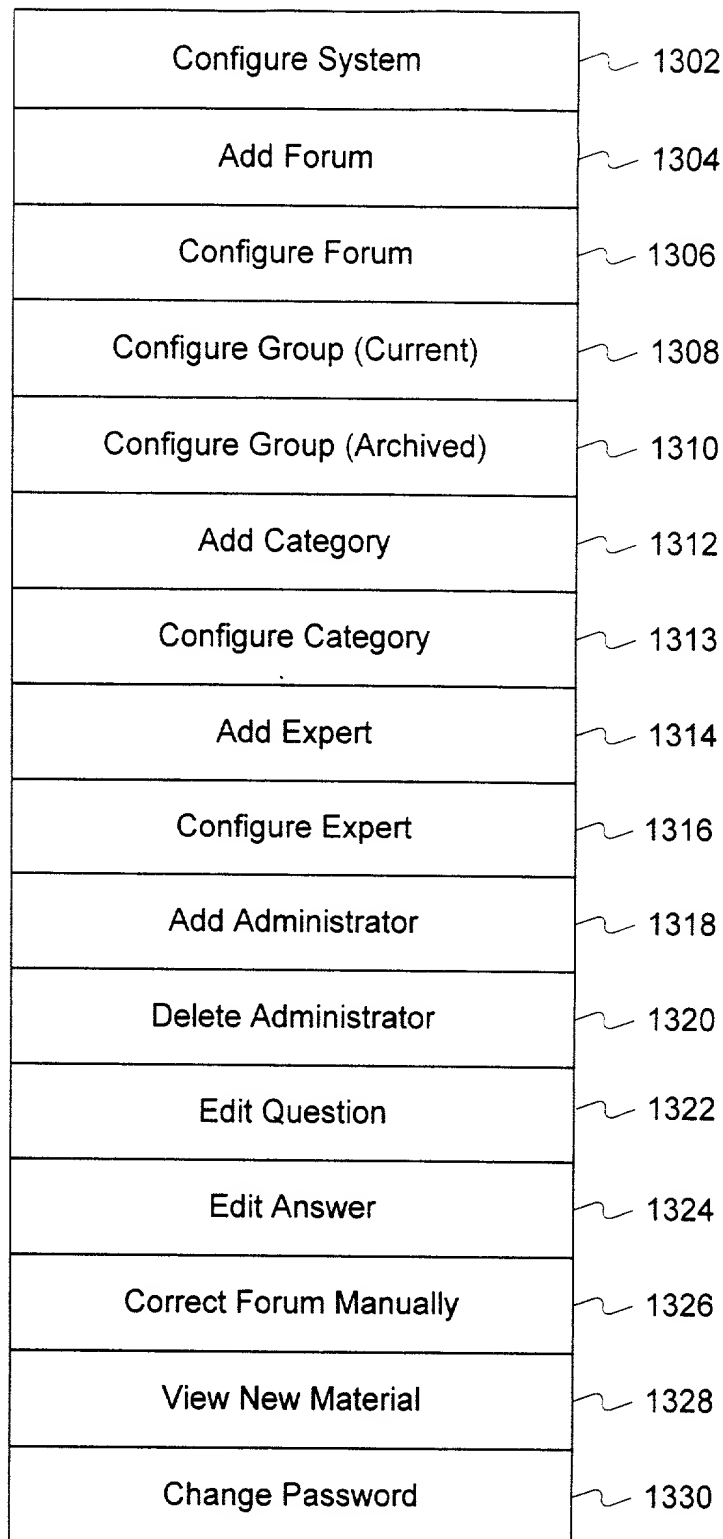
DELETE ADMINISTRATOR

Delete This
Administrator.

CHANGE PASSWORD

QUIT

FIG. 12



Configure System	1302
Add Forum	1304
Configure Forum	1306
Configure Group (Current)	1308
Configure Group (Archived)	1310
Add Category	1312
Configure Category	1313
Add Expert	1314
Configure Expert	1316
Add Administrator	1318
Delete Administrator	1320
Edit Question	1322
Edit Answer	1324
Correct Forum Manually	1326
View New Material	1328
Change Password	1330

FIG. 13

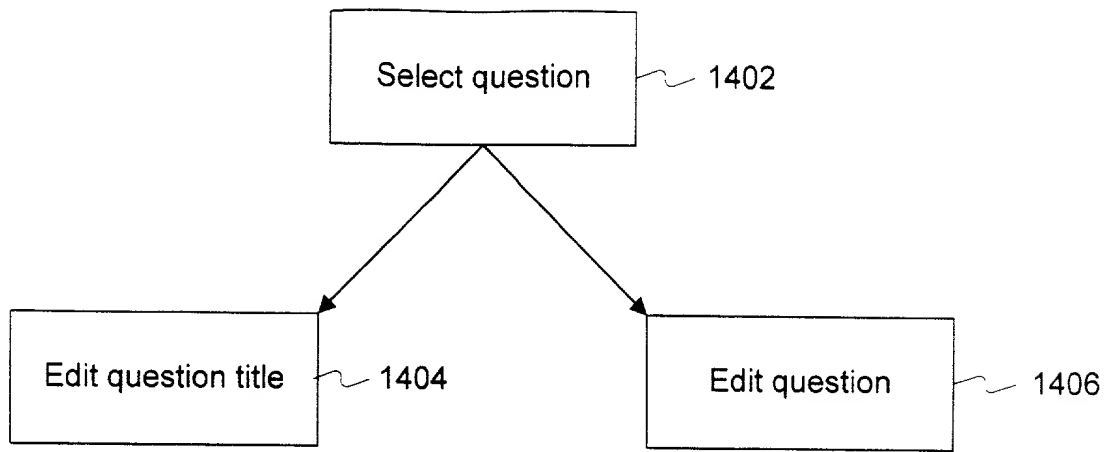


FIG. 14A

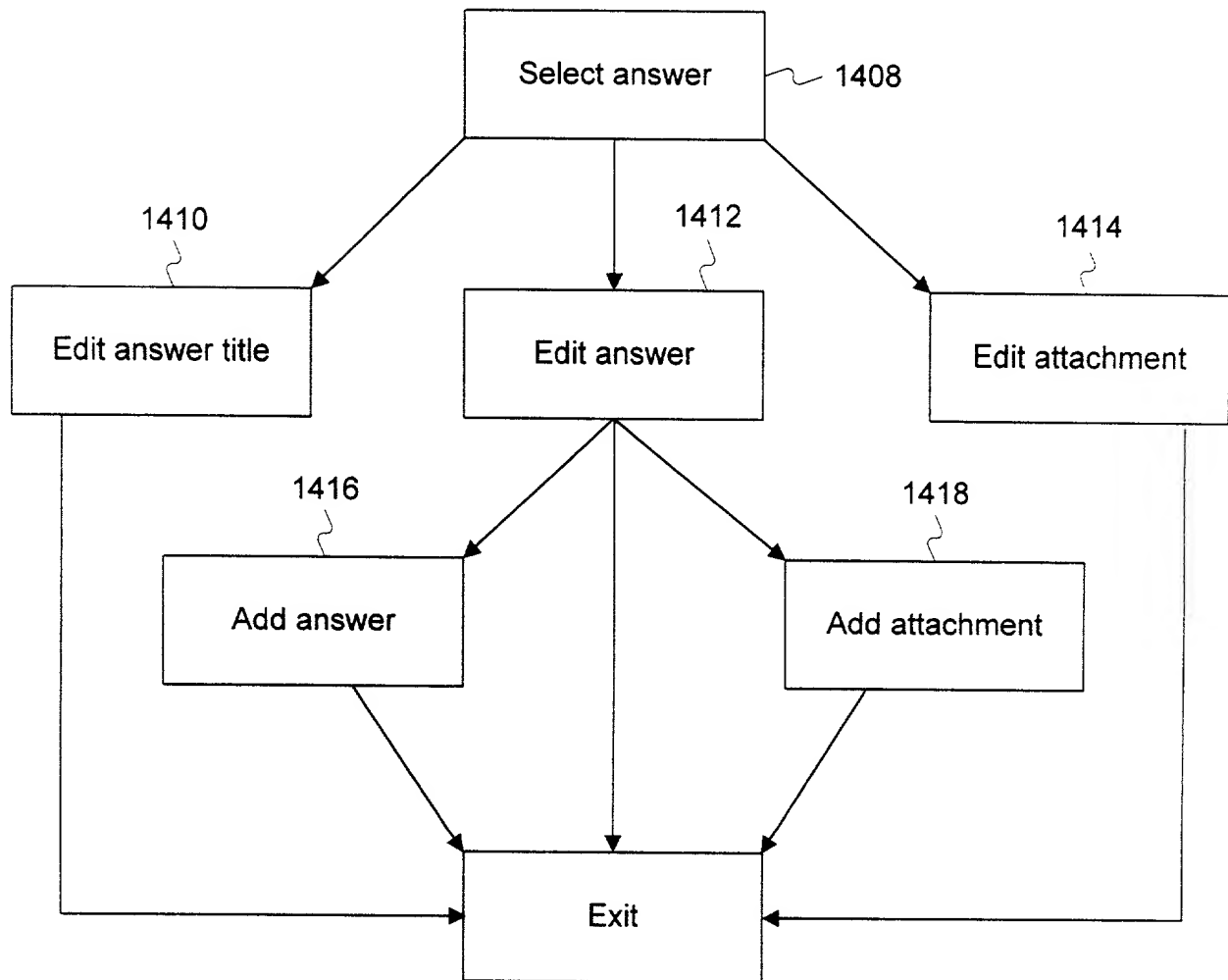


FIG. 14B

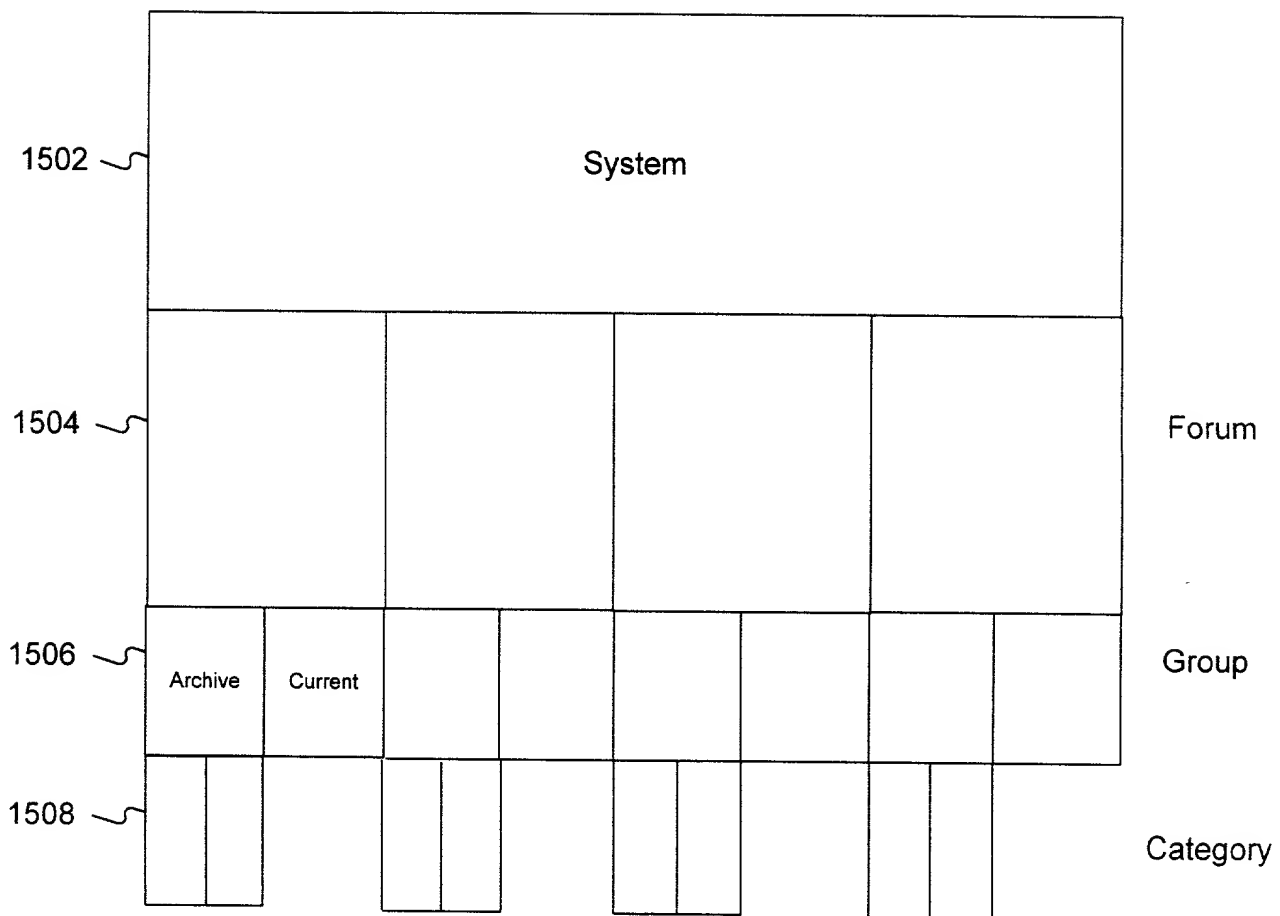


FIG. 15

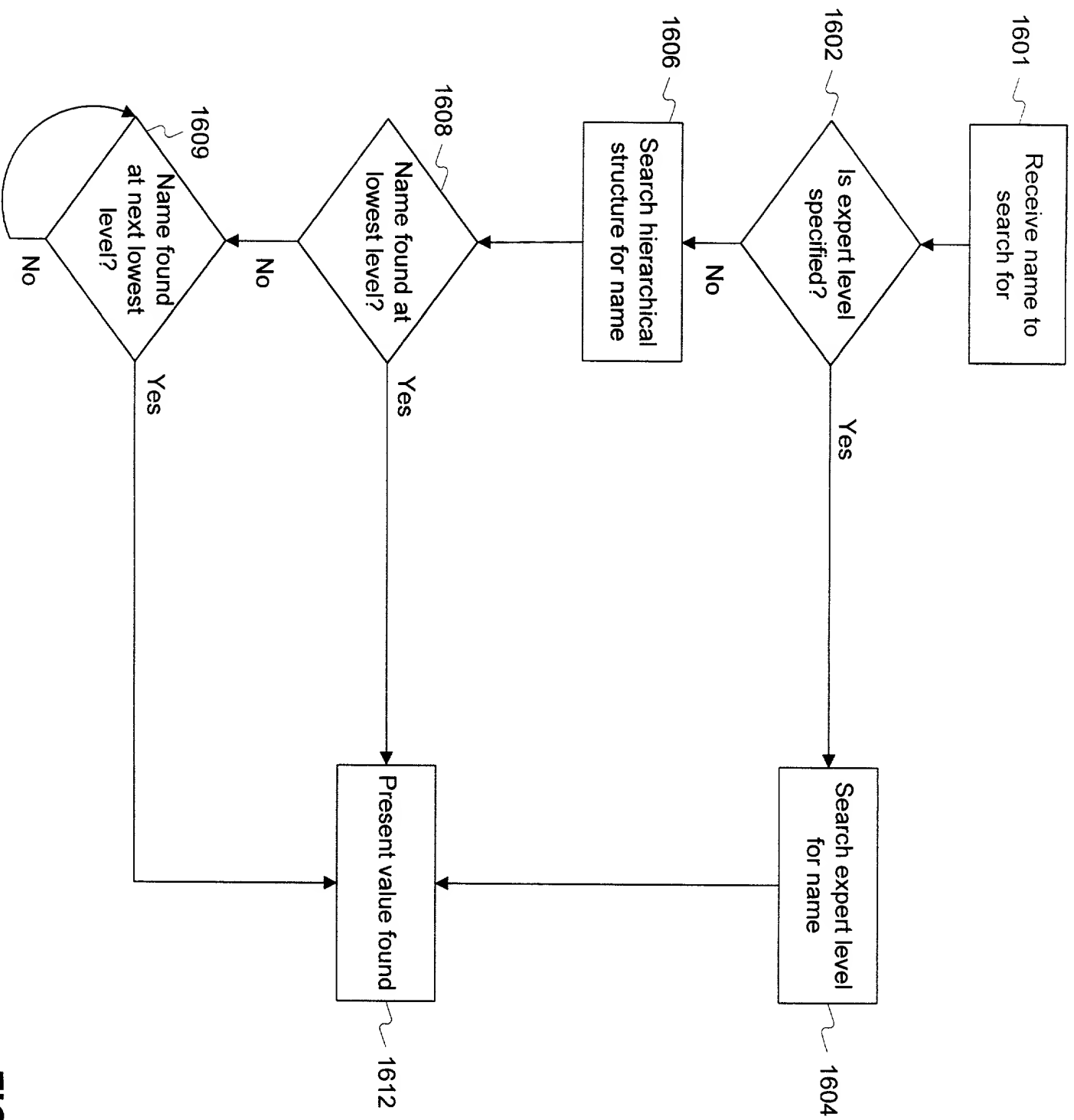


FIG. 16

DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that: my residence, post office address and citizenship are as stated below next to my name; I believe I am the original, first, and sole inventor (if only one name is listed below) or an original, first, and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: INTERACTIVE SYSTEM FOR MANAGING QUESTIONS AND ANSWERS AMONG USERS AND EXPERTS the specification of which ☒ is attached and/or ☐ was filed on _____ as United States Application Serial No. _____ or PCT International Application No. _____ and was amended on _____ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate or § 365(a) of any PCT international application(s) designating at least one country other than the United States, listed below and have also identified below, any foreign application(s) for patent or inventor's certificate, or any PCT International application(s) having a filing date before that of the application(s) of which priority is claimed:

Country	Application Number	Date of Filing	Priority Claimed Under 35 U.S.C.
			<input type="checkbox"/> YES <input type="checkbox"/> NO
			<input type="checkbox"/> YES <input type="checkbox"/> NO

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below:

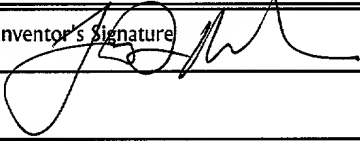
Application Number	Date of Filing

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s) or § 365(c) of any PCT International application(s) designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application(s) in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56 which became available between the filing date of the prior application(s) and the national or PCT International filing date of this application:

Application Number	Date of Filing	Status (Patented, Pending, Abandoned)

I hereby appoint the following attorney and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P., Douglas B. Henderson, Reg. No. 20,291; Ford F. Farabow, Jr., Reg. No. 20,630; Arthur S. Garrett, Reg. No. 20,338; Donald R. Dunner, Reg. No. 19,073; Brian G. Brunsvold, Reg. No. 22,593; Tipton D. Jennings, IV, Reg. No. 20,645; Jerry D. Voight, Reg. No. 23,020; Laurence R. Hefter, Reg. No. 20,827; Kenneth E. Payne, Reg. No. 23,098; Herbert H. Mintz, Reg. No. 26,691; C. Larry O'Rourke, Reg. No. 26,014; Albert J. Santorelli, Reg. No. 22,610; Michael C. Elmer, Reg. No. 25,857; Richard H. Smith, Reg. No. 20,609; Stephen L. Peterson, Reg. No. 26,325; John M. Romary, Reg. No. 26,331; Bruce C. Zotter, Reg. No. 27,680; Dennis P. O'Reilly, Reg. No. 27,932; Allen M. Sokal, Reg. No. 26,695; Robert D. Bajefsky, Reg. No. 25,387; Richard L. Stroup, Reg. No. 28,478; David W. Hill, Reg. No. 28,220; Thomas L. Irving, Reg. No. 28,619; Charles E. Lipsey, Reg. No. 28,165; Thomas W. Winland, Reg. No. 27,605; Basil J. Lewis, Reg. No. 28,818; Martin I. Fuchs, Reg. No. 28,508; E. Robert Yoches, Reg. No. 30,120; Barry W. Graham, Reg. No. 29,924; Susan Haberman Griffen, Reg. No. 30,907; Richard B. Racine, Reg. No. 30,415; Thomas H. Jenkins, Reg. No. 30,857; Robert E. Converse, Jr., Reg. No. 27,432; Clair X. Mullen, Jr., Reg. No. 20,348; Christopher P. Foley, Reg. No. 31,354; John C. Paul, Reg. No. 30,413; Roger D. Taylor, Reg. No. 28,992; David M. Kelly, Reg. No. 30,953; Kenneth J. Meyers, Reg. No. 25,146; Carol P. Einaudi, Reg. No. 32,220; Walter Y. Boyd, Jr., Reg. No. 31,738; Steven M. Anzalone, Reg. No. 32,095; Jean B. Fordis, Reg. No. 32,984; Barbara C. McCurdy, Reg. No. 32,120; James K. Hammond, Reg. No. 31,964; Richard V. Burgujian, Reg. No. 31,744; J. Michael Jakes, Reg. No. 32,824; Thomas W. Banks, Reg. No. 32,719; Christopher P. Isaac, Reg. No. 32,616; Bryan C. Diner, Reg. No. 32,409; M. Paul Barker, Reg. No. 32,013; Andrew Chanhon Sonu, Reg. No. 33,457; David S. Forman, Reg. No. 33,694; Vincent P. Kovalick, Reg. No. 32,867; James W. Edmondson, Reg. No. 33,871; Michael R. McGurk, Reg. No. 32,045; Joann M. Neth, Reg. No. 36,363; Gerson S. Panitch, Reg. No. 33,751; Cheri M. Taylor, Reg. No. 33,216; Charles E. Van Horn, Reg. No. 40,266; Linda A. Wadler, Reg. No. 33,218; Jeffrey A. Berkowitz, Reg. No. 36,743; Michael R. Kelly, Reg. No. 33,921; and James B. Monroe, Reg. No. 33,971. Please address all correspondence to FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P. 1300 I Street, N.W., Washington, D.C. 20005, Telephone No. (202) 408-4000.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Full Name of First Inventor James D. MARKS	Inventor's Signature 	Date 4/22/99
Residence 101 West 79 th Street, New York, NY 10024	Citizenship U.S.A.	
Post Office Address Same as above.		

Listing of Inventors Continued on Page 2 hereof. ☒ Yes ☐ No

July 1999

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P.

Full Name of Second Inventor Robert WEAVER	Inventor's Signature	Date
Residence 1515 Mahantongo Street, Pottsville, PA 17901		Citizenship U.S.A.
Post Office Address Same as above.		
Full Name of Third Inventor Jeremy SHAO	Inventor's Signature	Date
Residence 59 Livingston Street, Apartment 5B, Brooklyn Heights, NY 11201		Citizenship U.S.A.
Post Office Address Same as above.		

DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that: my residence, post office address and citizenship are as stated below next to my name; I believe I am the original, first, and sole inventor (if only one name is listed below) or an original, first, and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: INTERACTIVE SYSTEM FOR MANAGING QUESTIONS AND ANSWERS AMONG USERS AND EXPERTS the specification of which ☒ is attached and/or ☐ was filed on _____ as United States Application Serial No. _____ or PCT International Application No. _____ and was amended on _____ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate or § 365(a) of any PCT international application(s) designating at least one country other than the United States, listed below and have also identified below, any foreign application(s) for patent or inventor's certificate, or any PCT International application(s) having a filing date before that of the application(s) of which priority is claimed:

Country	Application Number	Date of Filing	Priority Claimed Under 35 U.S.C.
			<input type="checkbox"/> YES <input type="checkbox"/> NO
			<input type="checkbox"/> YES <input type="checkbox"/> NO

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below:

Application Number	Date of Filing

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s) or § 365(c) of any PCT International application(s) designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application(s) in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56 which became available between the filing date of the prior application(s) and the national or PCT International filing date of this application:

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Full Name of First Inventor James D. MARKS	Inventor's Signature	Date
Residence 101 West 79 th Street, New York, NY 10024	Citizenship U.S.A.	
Post Office Address Same as above.		

Full Name of Second Inventor Robert WEAVER	Inventor's Signature <i>Robert Y. Weaver</i>	Date 11/22/99
Residence 1515 Mahantongo Street, Pottsville, PA 17901		Citizenship U.S.A.
Post Office Address Same as above.		
Full Name of Third Inventor Jeremy SHAO	Inventor's Signature	Date
Residence 59 Livingston Street, Apartment 5B, Brooklyn Heights, NY 11201		Citizenship U.S.A.
Post Office Address Same as above.		

Listing of Inventors Continued on Page 2 hereof. ☐ Yes ☐ No

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P.

July 1999

DECLARATION AND POWER OF ATTORNEY

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Country	Application Number	Date of Filing	Priority Claimed Under 35 U.S.C.
			<input type="checkbox"/> YES <input type="checkbox"/> NO
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Application Number	Date of Filing

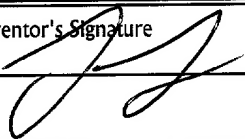
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Post Office Address Same as above.		

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Residence 1515 Mahantongo Street, Pottsville, PA 17901		Citizenship U.S.A.
Post Office Address Same as above.		
Full Name of Third Inventor Jeremy SHAO	Inventor's Signature 	Date 11/22/99
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